Alberta Limited Remediation Certificate Guide

Land Policy Branch



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Definitions

For the purpose of the *Alberta Limited Remediation Certificate Guide*, the following definitions apply. In the event that there is discrepancy from those defined within Acts or Regulations, the Acts and/or Regulations shall take precedence.

Agricultural Land: agricultural land as described in the Alberta Tier 1 Soil and Groundwater Remediation Guidelines (AENV, 2007a, as amended)

Application: an application for a remediation certificate.

Area(s) of Potential Environmental Concern (APEC): area(s) of potential environmental concern as defined in the Alberta Environmental Site Assessment Standard (AEP, 2016a).

Base of Remediation: base of remediation as defined in the Remediation Regulation (GOA, 2019).

Contaminant(s) of Potential Concern (CoPC): contaminant(s) of potential concern as defined in the Alberta Environmental Site Assessment Standard (AEP, 2016a).

Director: subject to Section 42 of the *Environmental Protection and Enhancement and Act* (RSA2000, cE-12) 'Act', a person designated as a Director for the purposes of this Act by the Minister.

Domestic Use Aquifer (DUA): an aquifer, as defined in the Alberta Tier 2 Soil and Groundwater Remediation Guidelines (AENV, 2007b, as amended)

EPEA: the Environmental Protection and Enhancement and Act (RSA2000, cE-12) or 'Act'.

Limited Remediation Certificate: limited remediation certificate as defined in the Remediation Regulation (GOA, 2019).

Parcel of Land: has the same meaning as in the *Municipal Government Act* (RSA2000, M-26).

Reclamation: reclamation as defined in the *Environmental Protection and Enhancement and Act* (RSA2000, cE-12) 'Act'.

Remediated Area: remediated area as defined in the Remediation Regulation (GOA, 2019).

Remediated Zone: remediated zone as defined in the Remediation Regulation (GOA, 2019).

Remediation: remediation as defined in the Remediation Regulation (GOA, 2019).

Site: site as defined in the Remediation Regulation (GOA, 2019).

Site-based Remediation Certificate: site-based remediation certificate as defined in the Remediation Regulation (GOA, 2019).

Schedule of Activities: schedule of activities as described in the <i>Environmental Protection and Enhancement and Act</i> (RSA2000, cE-12) 'Act'.					
Top of Remediation : top of remediation as defined in the Remediation Regulation (GOA, 2019).					

1. Introduction

1.1 Purpose

This guide and the Limited Remediation Certificate Application Form (AEP, 2019a) are for use by applicants applying to Alberta Environment and Parks' (AEP; "Department") for a Limited Remediation Certificate. Guidance is provided on the Department's requirements for a remediation certificate application, in accordance with Section 3.1 of the Remediation Regulation (GOA, 2019).

Section 112 of the *Environmental Protection and Enhancement Act* (EPEA) outlines the responsible party's Duty to Take Remedial Measures. Section 117 of the EPEA permits the Department to issue remediation certificates when remediation has been undertaken. Remediation certification is a voluntary process of regulatory liability closure for a remediated area. There are two types of remediation certificates available:

- Limited Remediation Certificates are for a remediated area; remediation occurring on a substance release in a single area of potential environmental concern (APEC).
- Site-based Remediation Certificates are for a remediated site; remediation occurring on all areas of
 potential environmental concern requiring remediation for the entirety of a site. May include multiple
 substance releases.

Guidance for Site-based Remediation Certificates is found in the Alberta Site-based Remediation Certificate Guide (AEP, 2019b).

Users of this guide and the Limited Remediation Certificate Application Form (AEP, 2019a) should have related experience and thorough understanding of contaminated sites, environmental site assessment (ESA) and remediation. Users are to be familiar with existing provincial legislation, regulations and related guidance documents, as well as applicable federal guidance and protocols. In addition to any requirements under this guide and application form, users must adhere to any other existing provincial regulation that is applicable to the substance release and impacted soil, water or groundwater.

1.2 Relationship to Other Documents

This guide provides information on Director requirements for a Limited Remediation Certificate application under Section 3 of Alberta's Remediation Regulation (GOA, 2019) and the Contaminated Sites Policy Framework (ESRD, 2014, as amended). In addition to any application requirements outlined in the form and

guide, the user must ensure that all requirements under Section 3 of the Remediation Regulation (GOA, 2019) for limited remediation certificate applications are contained in the accompanying application information.

This guide and its supporting documents replace A Guide to Remediation Certificates for Contaminated Sites (AENV, 2012) and its associated documents. This guide includes petroleum storage tank (PST) sites, approved facilities, facilities under Codes of Practice, and other activities that may result in substance releases to soil or groundwater.

2. Application for Remediation Certificates under the Contaminated Sites Policy Framework

Figure 1 of Alberta's Contaminated Sites Policy Framework (ESRD, 2014, as amended) provides a general

overview of Alberta's management system. More information on the management system and requirements

for management when a substance release is identified is available in the Framework.

A remediation certificate application is the last step in this process. It is expected, therefore, that the substance

release has already been reported and detailed records have been submitted to the Department before

application.

Where information is not up to date and complete and where required information in the application form has

not been provided, the application will be considered administratively incomplete and returned to the applicant

without review. For more information, see the Contaminated Sites Policy Framework (ESRD, 2014, as

amended) and supporting documents.

2.1 Substance Release Reporting

Applications for remediation certificates can only be made if the substance release was reported. If the

Department does not have a record of the release being reported, the application will automatically be

considered administratively incomplete. The Department may be contacted for questions concerning the

release reporting reference number or reporting process.

2.2 Source Removal, Source Control, Phase 2 ESA, and Remedial Action Plan

Part 5 of EPEA describes the legal duty of the person responsible to take remedial measures once

contamination is discovered. Under Section 112, the person responsible must repair, remedy and confine the

effects of the substance. Action must be taken to determine the nature and extent of the contamination, its

impacts, and subsequently remediate, manage, remove or otherwise dispose of the substance(s) in such a

manner as to prevent an adverse effect or further adverse effect from occurring.

Alberta's Contaminated Sites Policy Framework (ESRD, 2014, as amended) and supporting guidelines define

4 steps necessary to accomplish this:

1. Source removal/control,

2. Delineation,

3. Define remediation requirements and implement remedial action plan, and

4. Confirm remediation.					
These steps must be accomplished before submission of the Limited Remediation Certificate Application, and					
documents submitted must confirm that this has been completed.					

3. Remediation Certificates

Remediation certification is a voluntary program for substance releases intended to provide an incentive to clean up contamination by providing regulatory liability closure once a remediation certificate is issued. The Remediation Regulation (GOA, 2019) offers closure of regulatory liability for a remediated site. Limited Remediation Certificates are only issued on area(s) where a release occurred and its impact has been fully delineated, remediated and risk assessed.

3.1 Eligibility

The Department requires full disclosure of the release, including all assessment and remediation activities. Assessments must be in accordance with the Alberta Environmental Site Assessment Standard (AEP, 2016a, as amended) and include full delineation of the contaminated area. If delineation is not complete, remediation certificates will not be issued and applications will be returned without review. Requirements for eligibility for a Limited Remediation Certificate are described below.

3.1.1 Releases Contained On-site

If a release is contained within the property boundaries and does not extend beyond the legal land boundaries, or, if the release does not extend beyond the pipeline right-of-way, roadway, telecommunication line or transmission line right of way, the entire release must be completely remediated to comply with Alberta Tier 1 and/or Tier 2 Soil and Groundwater Remediation Guidelines (Alberta Tier 1 guidelines or Alberta Tier 2 guidelines) (AENV, 2007a or 2007b, as amended) for the area to be eligible for a Limited Remediation Certificate. Complete remediation includes contamination that has migrated under buildings and site infrastructure.

3.1.2 On-site Releases Extending Outside the Legal Land Boundaries or Lease Boundaries (Off-site)

If a release has migrated outside the legal land boundaries of a property, or extends beyond the lease boundaries or right-of-way, the release must have been reported to all affected third parties. As per the Contaminated Sites Policy Framework (ESRD, 2014, as amended), there is a requirement to ensure all affected persons are made aware of the issue and that their input is sought in any remedial action taken. Where the plan includes risk management, see the Alberta Exposure Control Guide (AEP, 2016b) and Alberta Risk Management Plan Guide (AEP, 2017a) for more details on requirements to engage affected persons regarding the risk management plan.

To be eligible for a remediation certificate, the on-site release must be remediated within legal land boundaries, lease boundaries or right of way of the activity that resulted in the substance release to comply with Alberta Tier 1 and/or Tier 2 guidelines. Any unremediated off-site portions of the release must be subject to an acceptable ongoing risk management plan. Regulatory closure will only be provided for the portion of remediation complying with Alberta Tier 1 and/or Tier 2 guidelines. Any remaining contamination will not be certified and remains potentially subject to enforcement provisions under EPEA.

If a risk management plan is required, the risk management plan must be accepted by the Director before an application for a remediation certificate can be reviewed and issued. For more information on the risk management plans, see the Alberta Exposure Control Guide (AEP, 2016b, as amended) and the Alberta Risk Management Plan Guide (AEP, 2017a).

The Risk Management Plan Guide (AEP, 2017a) is structured to allow for a broad range of risk management plans. While risk management may be an option for managing off-site risks associated with the residual contamination, the on-site remediation may not be eligible for a remediation certificate, or may only be eligible for a remediation certificate if accompanied by a letter of no objection from all affected third parties. For more information on risk management plans and remediation certificates, see Application Section 9.

Any portion of the release under a risk management plan remains the responsibility of the person(s) responsible for the release under EPEA. For the purpose of obtaining a Limited Remediation Certificate, risk management plans may only be developed for off-site residential, commercial or industrial lands as defined in the Alberta Tier 1 guidelines (AENV, 2007a, as amended). Exposure control methods or procedures used to prevent future re-contamination of the remediated area by off-site residual contamination must be included and must demonstrate that re-contamination is not likely.

3.1.3 Remediation of Off-site Area Only

Remediated areas on land that was not the source or origin of contamination may be eligible for a Limited Remediation Certificate. In order to be eligible under this option, the applicant must demonstrate that the remediated area was not in any way connected with the site or any associated infrastructure. Exposure control methods or procedures used to prevent future re-contamination of the remediated area must be included and must demonstrate that re-contamination from off-site contamination is not likely.

3.1.4 Number of Remediation Certificates

More than one Limited Remediation Certificate can be issued on a site if there is more than one release. If an

area is risk managed, and eventually meets current Alberta Tier 1 and/or Tier 2 guidelines, the area is then

eligible for a remediation certificate

3.2 Ineligibility

Any remediated site that does not meet the most recent published Alberta Tier 1 and/or Tier 2 guidelines at

the time of application is not eligible for a remediation certificate.

Natural or agricultural land use requires complete remediation to Alberta Tier 1 and/or Tier 2 guidelines and

is not eligible for a remediation certificate if a risk management plan is in place. For the definition of

agricultural or natural land uses, see the Alberta Tier 1 guidelines (AENV, 2007a, as amended).

The Department will not certify land where contamination identified does not exceed Alberta Tier 1 or Tier 2

guidelines. Where the entire release has been assessed and meets the Alberta Tier 2 guidelines without

requirement for remediation, it may be possible to apply for a Tier 2 Compliance Letter. For more information,

see the Alberta Tier 2 Compliance Letter Guide (AEP, 2019c).

In order to apply for a Limited Remediation Certificate, it must be clear that the area that is the subject of the

application was historically contaminated above the applicable Alberta Tier 1 or Tier 2 guidelines. If

information is not available confirming previous contamination, it is not eligible for a remediation certificate,

even if there may have been a historical release on the site. For instance, where contaminants of potential

concern (CoPC) have been remediated using longer term or in-situ remediation techniques, the historical

information may not be available to confirm that the original substance release was above the applicable

criteria. Only the area that is confirmed to have been historically above the guideline may be included in the

certificate application.

Land that has received a closure letter from the Department in the past does not automatically qualify for a

remediation certificate. The remediation certification program is voluntary and there is no requirement to

pursue a remediation certificate after a closure letter has been issued. Land that has received a reclamation

certificate from the Department does not qualify for a remediation certificate.

The Department does not issue remediation certificates for sites on federal land.

3.3 Liability Closure

Once a remediation certificate is issued, the Department will not issue an environmental protection order for the remediated area if it was compliant with Alberta Tier 1 and/or Tier 2 guidelines or Alberta Tier 2 guidelines that were in effect at the time of certification.

If the land use changes to a more stringent land use after a remediation certificate is issued, the person making the change will be required to conduct additional assessment and/or remediation to ensure that the remediation certificate is valid for the more stringent land use. The original remediation certificate will not apply to a new, more stringent, land use. For land use changes where the land use is less sensitive or less stringent than the previous land use, the remediation certificate will still be valid for the land use change. For instance, if the former land use was commercial and it is changed to industrial, the remediation certificate is still valid for the industrial land since it is typically less stringent than the commercial land use. However, if the land use changes from commercial to residential, the remediated area will not be covered by a remediation certificate for commercial land use.

If an audit or substantiated complaint indicates that the remediated area was not compliant with the Department's requirements at the time of certification, the remediation certificate may be rescinded. Liability would remain with the person responsible. To receive a remediation certificate, the applicant would need to make the remediated area compliant with the standards of the day and reapply for a remediation certificate with a new application fee.

4. Guide to Users for the Limited Remediation Certificate Application

A Limited Remediation Certificate Application Form (AEP, 2019a) must be completed when applying for a Limited Remediation Certificate. The following provides a guide to filling out the application form:

4.1 Application Section 1: Tracking Information

Submission Date: Enter the date of application submission to the Department. The Department will review the application with the standards and guidelines at the time of application. For example, applications submitted in 2018 would be held to Alberta Tier 1 and/or Tier 2 guidelines published in 2016. The date format must be: dd-mmm-yyyy (e.g. 15-Feb-2019).

Release Reporting Reference Number: applications for remediation certificates can only be made if the substance release was reported. Sections 110 and 111 of the EPEA provide the basis for Alberta's Release Reporting Regulation (GOA, 1993) which stipulates what must be reported, when, how and to whom. A Guide to Release Reporting (AENV, 2005) provides further information about Department requirements for reporting a release. To report a release call the Department at 1-800-222-6514. If the Department does not have a record of the release being reported, the application will automatically be considered administratively incomplete and the application will be returned without review.

EPEA Approval Number: The EPEA and accompanying regulations set out in detail which activities require approvals and the process for obtaining them. If the subject of this application resulted from an EPEA approved activity, the approval number is required. The EPEA approval number is referenced on letters to the approval holder, and can be found using the Authorization Viewer located at: https://avw.alberta.ca/ApprovalViewer.aspx

Water Act **Approval Number**: The *Water Act* (RSA2000, cW-3) and accompanying regulations set out in detail which activities require approvals and the process for obtaining them. If the subject of this application resulted from a *Water Act* approved activity, the approval number is required. The *Water Act* approval number is referenced on letters to the approval holder, and can be found using the Authorization Viewer located at: https://avw.alberta.ca/ApprovalViewer.aspx

Public Lands Disposition: Administration of public lands includes controlling "Rights of Access," "Surface Rights" and "Subsurface Rights" (mineral rights). The Department manages the use of public land for all Albertans through the issuance of dispositions. A disposition must be obtained under the *Public Lands Act* for any access to or activity on public lands and in compliance with the Public Lands Administration Regulation.

If the subject of this application required a public lands disposition, the disposition number is required. The

Public Land Disposition number is referenced on correspondence from the Department.

Other: Provide the name and tracking number of any correspondence provided to you by the Department.

4.2 Application Section 2: Legal Land Description

Section 2 requires the location, landowner, and occupancy of the:

• Parcel(s) of land that was the original source of the substance release,

• Parcel(s) of land impacted by the substance release, and

• Parcel(s) of land that were remediated.

The only **land types** that are eligible for limited remediation certificates are:

• **Private**: land legally owned by one or more individuals or a business entity.

• Special Areas: land administered by the Special Areas Board under the Special Areas Act.

• **Public**: land owned by the Crown in Alberta.

• **Municipal**: Land owned by the municipality or county.

Federal lands are not eligible for Limited Remediation Certificates.

Municipal Address: This is the address of the physical location of the site. Enter a single site address that best describes the location. Street addresses should be provided for urban sites, and an Alberta Township System (ATS) address can be used for rural and public land locations. For remediation certificates involving more than one property (e.g., where remediation extends beyond a single property boundary), enter the address for the

source property. The municipality at county or city level must be provided for all sites.

Legal Land Description: Enter all legal land descriptions that are the subject of the remediation certificate

application. The information required is identified as the "short legal" on an Alberta Land Title. Where the

remediation certificate covers more than one legal land description, all relevant legal land descriptions should

be entered in these fields.

A Plan, Block, Lot (PBL) and or Alberta Township System (ATS) legal land description with GPS coordinates

(NAD83) must be provided for all lands that are the subject of the Limited Remediation Certificate application.

- Use the PBL to describe locations in urban municipalities, rural subdivisions, hamlets, and summer villages.
- Use the ATS for rural or public land locations.
- If the site only covers one legal subdivision (LSD), all fields to the LSD level must be entered.
- If multiple legal subdivisions are required to completely describe the site, completion of the LSD field is
 optional.

The names, phone numbers, mailing and email addresses of all registered owners of the source property and properties affected by the release, must be provided. Copies of the land title must be attached for each registered landowner. If the number of landowners exceeds three, attach information for additional landowners separately.

Identify the occupant(s). Occupant means the property owner(s), operator, or other person(s) that rent or lease the property. For agricultural sites, identify any owner or lessee who may only occasionally use the site for agricultural operations.

4.3 Application Section 3: Applicant

There are no restrictions as to who can apply for a Limited Remediation Certificate. In general, the applicant will be the person responsible for contamination; however, this is not a requirement. If the applicant is a company, the full legal registered name of the company must be provided and the contact person must be a representative of the company, not an agent or consultant. An agent or consultant (e.g., environmental professional) may prepare the application, however, they are not considered the applicant, and the applicant must sign the applicant declaration in Section 13 of the application form.

4.4 Application Section 4: Environmental Professional

The legal registered name of the consulting company that completed the remediation must be provided. The environmental professional listed in this section does not necessarily have to be the same individual as the environmental professional that signs the professional declaration in Section 12.

4.5 Application Section 5: Activity

An activity is defined in the EPEA. Activities that require approval or registration by the Department are defined in the Activities Designation Regulation (Alberta Regulation 276/2003) in EPEA. Only common types of activities are identified in this guide and application form. Most operations can be described using one type

of activity and a single authorization, registration, or approval. On the application form, select the most appropriate activity that applies.

4.5.1 Application Section 5.1 - Current Operating Status

Select the most appropriate operating status of the source property:

- Operating The site is functioning and operational on a daily basis. Infrastructure at the site is functional and in use. Normal production or operation activities are ongoing at the facility.
- **Abandoned in Place** This pertains only to underground petroleum storage tank sites, and requires prior approval. Where it is not practical to remove an underground tank, it may be left in place if permission is granted by the authority having jurisdiction. The circumstances and conditions that may allow abandonment in place are listed in Article 4.3.16.2 of the Alberta Fire Code.
- **Decommissioning in Progress** May include removal or dismantling of infrastructure, and the conducting of environmental site assessments, remediation and reclamation.
- **Decommissioned** All operating infrastructure has been removed from the site and it is not operational on a daily basis. All or part of a commercial or industrial facility has been closed, followed by the removal of process equipment, buildings and other structures.
- **Closed** Refers to a commercial or industrial operation that has been fully decommissioned, all regulatory obligations are fulfilled, and the operation has ceased to exist.
- Not Applicable none of the above apply to the source property. Specify the operation.

4.5.2 Application Section 5.2 - Petroleum Storage Tank Site

Most sites in this category should have a registration number from the Petroleum Tank Management Association of Alberta (PTMAA) under the Alberta Fire Code, and/or an Alberta Municipal Affairs (AMA) file number if it is part of the Tank Site Remediation Program, if applicable. Sites with storage tanks that have been out of service since August 1, 1993 may not have a registration number but should still be included in this category.

This category is intended to capture tanks requiring registration and does not include any tanks that are: smaller than 2500 L, used for agricultural purposes, used to store products that are not petroleum products, and/or used at upstream oil and gas facilities. For these facilities, select the most appropriate category from the remaining list. Select the most appropriate type of PST site. For tanks abandoned in place include the approval documentation from the PTMAA and/or local fire official. List non-PTMAA tanks under Section 6.5, Other Contaminated Sites.

4.5.3 Application Section 5.3 - Approved Facility under EPEA

Only common types of activities are identified in the application form. Most operations can be described using one type of activity and a single approval number. If more than one approval number is available, preference is given to the EPEA approval number. Select the most appropriate type of approved facility, or select 'Other' and list the type of approved facility.

4.5.4 Application Section 5.4 - Facility under EPEA Code of Practice

Only common facilities that have the potential for substance releases are listed. Most operations can be described using one type of activity. Select the most appropriate type of activity, or select 'Other' and list the type of activity under Code of Practice.

4.5.5 Application Section 5.5 - Other Activities

This includes industrial or commercial activities not identified in Sections 5.2 to 5.4. Only common types of activities are identified in the application form. Most operations can be described using one type of activity. Select the most appropriate type of activity, or select 'Other' and list the type of activity.

4.6 Application Section 6: Substance Release Summary

For historic releases it is acknowledged that the applicant may not know all the requested details of the release (e.g., CoPC discovered during the course of work without prior knowledge of the release). Complete this section as accurately as possible. If the date of the release is unknown, indicate when the contamination was first discovered.

4.7 Application Section 7: Site Assessment and Remediation Checklist

A detailed Phase 2 ESA must be completed and the final reports must be submitted to the Department.

The Phase 2 Environmental Site Assessment Checklist (Phase 2 ESA checklist) (ESRD, 2013) must have been completed and submitted to the Department by the environmental professional before the Limited Remediation Certificate application can be processed. If this has not been done as part of the Phase 2 ESA that was previously completed, you will need to complete this and submit as part of the application. For more information, see the Alberta Environmental Site Assessment Standard (AEP, 2016a, as amended).

You must confirm that all Phase 2 site information has been submitted to the Department and the Phase 2 ESA shows complete delineation in the horizontal and vertical directions for all APEC associated with the substance release. While the Alberta Environmental Site Assessment Standard (AEP, 2016a, as amended) remains a flexible tool that allows for a staged assessment and remediation approach, delineation must be completed by the time of application and the application form and file information needs to demonstrate this.

The Alberta Environmental Site Assessment Standard (AEP, 2016a, as amended) allows for remediation to proceed in conjunction with site assessment. While it may be possible to confirm complete delineation as part of the remediation report, this must be completed and full delineation confirmed as part of this application.

You must confirm that all information has been submitted to the Department and note pertinent sections of the report in the application form. If information required as part of this application is not provided, the application will be considered administratively incomplete and will be returned without review. If answers within the application cannot be verified based on the information submitted, the application will be considered incomplete, and returned without review.

4.7.1 Application Section 7.1 - Land Use and Soil Texture Selection

Land use and soil texture are based on definitions provided in the Alberta Tier 1 guidelines. In Section 7.1.1, select the land use classification used to assess the remediated area. If the remediated area includes more than one parcel of land, select the land use that is applicable to these parcels of land. In Section 7.1.2, identify the land use for any other parcel of land outside the remediated area that was impacted above the applicable Alberta Tier 1 or Tier 2 guidelines. For this application, select the most stringent land use that would apply to the assessment of the parcel(s) of land for the entire impacted area. If two different land uses have been used to describe the entire impacted area, select the most stringent land use. For instance, if the remediated area covers both residential and commercial land use, select the residential land use.

Identify the dominant soil texture that would be used in determining the applicable Alberta Tier 1 guidelines. The dominant soil texture is that which governs fate and transport via the various transport and exposure pathways. If the soil texture is ambiguous or more than one soil classification exists at a site, use the soil texture class associated with the most conservative guideline.

When selecting land use, the environmental professional needs to verify with the landowner, municipality, county, or municipal district whether there are any plans to change the land use classification for the site. Identify this in the future land use and attach supporting documentation for future land use changes. For

facilities on specified land as defined in the EPEA, identify the land use that can reasonably be expected after termination of an industrial or commercial activity in the future land use category. For instance, for specified land, identify the land use that will be required after remediation and reclamation at the end of the facility life. Where there is no specific information available, the surrounding land use or pre-disturbance land use applies.

4.7.2 Application Section 7.2 - Guideline Selection

Select the Alberta Tier 1 or Alberta Tier 2 option that was used in developing remediation criteria for all CoPC that are relevant to the substance release. If more than one option was used for different CoPC or APEC, identify all that apply. Identify the year the guideline was published. The guidelines that were used need to be consistent with the most recent published guideline at the time of application.

If an Alberta Tier 2 option was used for evaluation of any CoPC, you must identify the Tier 2 option that was applied, the pathway(s) for which Tier 2 was evaluated and all CoPC that were evaluated using this option.

The Alberta Subsoil Salinity Tool (GOA, 2014) is considered a Tier 2 guideline adjustment. For the purpose of this form, select Tier 2 guideline adjustment for any CoPC that was analyzed using this option.

Parameters such as Electrical Conductivity and Sodium Adsorption Ratio are not included in Table 1 of the Alberta Tier 1 Soil and Groundwater Quality Guidelines (AENV, 2007a) but are included in Table 4 of the guidelines. While they are not direct measurements of a CoPC, they are considered important criteria for determining impacts from salt contamination to soil. Include these values as CoPC for any assessment of salt contamination.

4.7.3 Application Section 7.3 - Tier 2 Mandatory Evaluation

Where the Tier 2 assessment does not include a mandatory Tier 2 evaluation, then identify this in the first response and proceed to the next section. Where a mandatory Tier 2 evaluation is required, as identified in the Alberta Tier 1 Soil and Groundwater Quality Guidelines, identify the reason for the mandatory Tier 2. Identify all that apply.

4.7.4 Application Section 7.4 - Site Assessment Checklist

The Phase 2 ESA checklist is required as part of the application form. For sites assessed before 2019, this may not be included in the Phase 2 ESA. If the checklist has not been completed and submitted to the Department, you must complete this checklist and submit it as part of the application in order for the application to be

considered administratively complete. All applications that are not administratively complete will be automatically refused.

Meeting the requirements of the Phase 2 ESA checklist does not necessarily confirm that the substance release was fully delineated and remediated. Therefore, complete the remaining questions and confirm, in the application, the sections of the report(s) where this information can be found.

4.7.5 Application Section 7.5 - Tier 2 Evaluation Checklist

Complete this section if any Tier 2 option was identified. If all parameters were compared only against the Alberta Tier 1 guidelines, then proceed to the next section.

Tier 2 allows for pathway exclusion, guideline adjustment or site-specific risk assessments (AENV, 2014). Tier 2 risk assessments should have been submitted to the regulatory agency for review prior to application for a remediation certificate. Evaluation of Tier 2 risk assessments are not done as part of a remediation certificate application. They will be referred to another reviewer for comment. In all instances, Tier 2 modifications will require the use of procedures, protocols and monitoring that are acceptable to the Department. Where no clear guidance documents have been accepted by the Department, discussion will be required with the Department prior to acceptance of final remediation objectives. For instance, while guidance is available for pathway exclusion and guideline adjustments in Tier 2, there still is limited guidance available to monitor parameters in the field or to determine appropriate parameters. It is important to have this information verified before application for a remediation certificate. Similarly, site-specific risk assessment guidance is considered out of scope of the Alberta Tier 2 guidelines, and therefore, will require review by the Department prior to application.

Site-specific risk assessments and guideline adjustments should be submitted for review prior to submitting a remediation certificate application. If a risk assessment is submitted as part of a remediation certificate application, the risk assessment will be referred to a reviewer and the remediation certificate application will remain in the queue until the review is complete.

Where the Tier 2 assessment includes Protection of Groundwater for Potable Water Use, Vapour Inhalation, or Protection of Groundwater for Freshwater Aquatic Life answer all appropriate questions for this category. If this pathway is not evaluated at Tier 2, answer "No" and skip the additional questions for that category.

Some pathways cannot be excluded at Tier 2 and automatically imply risk management. Applications involving any of these pathways cannot be processed unless this is included in an accepted risk management plan. For more information on pathways that cannot be excluded, see the Alberta Tier 2 guidelines.

4.8 Application Section 8: Remediation

The application for a remediation certificate must include a completed remediation report. Remediation reports must be completed consistent with the Alberta Environmental Site Assessment Standard (AEP, 2016a, as amended) and must include all of:

- the methods of field investigation and laboratory analysis used to determine which substances required remediation and the extent of the remediation required;
- the determination of the applicable Guidelines;
- particulars of the characteristics of the land where the remediated area is located, including topography, drainage, soil and vegetation;
- subsurface descriptions, including observed or measured engineering, geological and environmental properties that affected the remediation procedure or the selection of the applicable Guidelines;
- the methods used for sampling and testing the samples (include borehole logs);
- the analytical results of any samples taken from the remediated zone and areas outside the remediated zone before, during and after remediation;
- GPS referenced coordinates of the remediated zone;
- a diagram, including cross-sections, showing the top of remediation and the base of remediation within the remediated area;
- the dates the remediation started and ended;
- the types and volumes of materials, including substances, taken from the remediated zone in the course of remediation;
- the location where any materials removed from the site were taken¹;
- the methods used to remediate any substances that were not transported to a waste management facility for all materials removed from the site.
- for any material that was removed from the remediated area that did not meet the soil or groundwater criteria after remediation, the type of waste management facilities to which materials and substances from the remediated zone were taken:

¹ Any material that is removed from the remediated area and treated ex-situ is considered a waste. If it is not remediated to meet the applicable soil or groundwater criteria, you must meet all requirements of Alberta's waste policy including the beneficial use of waste policy at the receiving site.

- analytical results of the remediated materials for any materials that were removed from the remediated area but not transported to a waste management facility;
- the methods used to remediate any substance remaining within the remediated zone;
- the source and volume of any soil materials brought to the remediated zone to replace soil taken to a waste management facility;
- analytical results confirming that the soil materials are of suitable quality for use as replacement fill based on the land uses;
- the methods used to determine that the remediation was successfully completed, and
- the analytical results showing that the remediation was successfully completed.

4.8.1 Application Section 8.1 - Remediated Substances

For the substance release, list all CoPC that can result from that substance release, the highest concentration in soil and groundwater that was observed before remediation, and the highest concentration in soil or groundwater that was observed after remediation. For parameters listed in Alberta Tier 1 guidelines that are commonly used to evaluate the effect of a given substance release but are not considered CoPC (e.g. electrical conductivity, sodium adsorption ratio, pH), list these parameters as CoPC.

Remediation objectives for substances not listed in the Alberta Tier 1 guidelines must be acceptable to the Director or an inspector prior to application submission. For more information on the development of remediation objectives for CoPC not included in Alberta Tier 1 guidelines, see the Alberta Guidance for Selecting Toxicity Reference Values for Alberta Tier 1 and Tier 2 Soil and Groundwater Remediation Guidelines (AEP, 2017b).

Unless you have been able to answer, and demonstrate that contamination did not enter the groundwater, you must complete the groundwater section of the application form.

At this stage in the remedial process, you need to have completed delineation in the vertical and horizontal direction, have a completed remediation report, and if any contaminant was assessed using the Alberta Tier 2 guidelines, a completed Alberta Tier 2 assessment.

4.8.2 Application Section 8.2 - Remediation Process

For the substance remediation completion date, use the date that the analytical results confirmed successful remediation of the CoPC. If different dates are available for different substance releases, or if ongoing

monitoring was required to verify a site meets the applicable guideline, use the date of the final analytical report.

For any material that was remediated in-situ or remediated ex-situ on the site, include this in treatment of soil and groundwater on-site. If any material that was removed and placed in any other location outside the remediated area, identify this as removed and placed in another location outside the remediated area.

Any material that was moved out of the remediated area but does not meet the applicable Alberta Tier 1 residential or agricultural guidelines is considered a waste and must be tracked. Contaminated soil that is removed from the area must either be treated to meet the applicable soil or groundwater criteria or it must be disposed of in a waste management facility. Provide information for all materials that were removed from the site and where they were transported to.

If the material that was removed was not moved to a waste management facility, you must identify the legal land location where the material was placed as the final location.

For the receiving waste management facility, provide information on the name and location of the facility and the Authorization Number. The receiving facility must be authorized to receive the type and volume of waste generated. The Authorization Number, can be found using the Authorization Viewer located at: https://avw.alberta.ca/ApprovalViewer.aspx

If soil was imported to the remediated area, you must provide information on the source of soil, volume imported and provide evidence that the imported soil quality meets the requirements for the remediated area, including a material assessment report (e.g., analytical results for the imported material).

4.8.3 Application Section 8.3 - Confirmation of Remediation

Include reference to the remediation report and the appropriate page numbers that confirm remediation was achieved. Reference the appropriate analytical results for confirmatory sampling and attach to the report.

If the entire substance release has been remediated, note this in Section 8.3, include the reference that confirms this and proceed to Section 10. Otherwise, proceed to Section 9, risk management plan under the exposure control option.

4.9 Application Section 9: Risk Management Plan under the Exposure Control Option

Section 4(6) of the Remediation Regulation (GOA, 2019) allows for a risk management plan to be considered as part of an application for a remediation certificate provided it meets all the regulatory requirements and any other Director requirements.

For any substance release where CoPC are outside the remediated area that do not meet the Alberta Tier 1 or Tier 2 guidelines, this section must be completed.

All risk management plans must already have been accepted by the Director. You must reference the risk management plan and the acceptance letter from the Director. Where a risk management plan is not on file and where it cannot be confirmed that the plan was accepted, the application is administratively incomplete and the application will be refused.

Include in the references information on the risk management plan, the Director acceptance letter and any administrative, physical and monitoring requirements that are required under the risk management plan. Requirements for risk management are typically in the summary of the plan. Where these are not summarized, they must be included as part of the application.

Answer all questions in Section 9 and note the pertinent references from the reports that support the response. Plans that are submitted under the risk management plan guide may include features that present higher risks in the event of failure, or are more difficult to maintain for longer time periods. These types of plans, however, may not allow for issuance of a remediation certificate because of the higher risk and because mechanisms to ensure long term viability under the remediation certificate program are not currently in place. For instance, it will be more difficult to issue remediation certificates where plans require active risk management options such as vapour extraction, groundwater extraction or where residual concentrations in soil or groundwater would be considered high risk if exposed to a surface receptor because of the challenges for long term care and control of the risk managed area. Therefore certain types of risk management plans will not be considered under applications for remediation certificates.

If the risk management plan contains the following features, the application will only be considered for a Limited Remediation Certificate if all affected third parties have signed letters of no objection (see the Alberta Risk Management Plan Guide (AEP, 2017a) for an example template).

- Any risk management plans that involve restrictions on land use for residential properties that are not high density² unless those restrictions are already part of land use bylaw, municipal development plan, area structure plan, area redevelopment plan, or any other relevant policies that will restrict these activities on the facility.
- Any risk management plan that requires management of contaminant concentrations that would result in exposure that would exceed an acute or subchronic exposure level³ for the pathway(s) under risk management in the event of the failure of the risk management plan.
- Any risk management plan that requires ongoing monitoring on third party property.
- Any risk management plan that requires engineered controls for management of risks on residential lands
 unless those are already part of the land use bylaw, municipal development plan, area structure plan, area
 redevelopment plan, or any other relevant policies.
- Any risk management plan that requires management of risks on third party property that exceed management limits in the Alberta Tier 1 guidelines.

If the risk management plan contains the following features, the risk management plan will not be considered for a Limited Remediation Certificate:

- Any risk management plan on agricultural or natural land.
- Any risk management plan that requires restrictions to surface land use, or impacts to rare or endangered species, unless these are already incorporated into the land use plan.
- Any risk management plans that include impacts to soil, sediment, or groundwater within 10 metres of an
 aquatic water body that exceed Environmental Quality Guidelines for Alberta Surface Water (AEP, 2018,
 as amended).
- Any risk management plan that does not include stable or decreasing plumes or where the source is not completely remediated or controlled.
- Any risk management plan that requires restriction to access of groundwater for drinking water unless there are no water wells within the risk managed area and,
 - There is a public disposition in place that restricts access to any domestic use aquifer for all area that is risk managed or,

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² For the purpose of this document, a high density residential building is considered a multi-unit dwelling, residential facility or institutional facility in a building of more than 3 stories.

³ For a definition, see the Alberta Guidance for Selection Toxicity Reference Values for Alberta Tier 1 and Tier 2 Soil and Groundwater Remediation Guidelines. For the purpose of this document, where the risk assessment on file and risk management plan that was accepted do not include an accepted endpoint for the CoPC, any exceedance of 10 times the relevant Tier 1 guideline for the exposure pathway will be assumed to be over this criteria. For more information, see the Alberta Risk Management Plan Guide.

- There is confirmation referenced and included in the risk management plan from the local authority that there are bylaws restricting access to the groundwater for this purpose and these can be used as an administrative control or.
- Letters of no objection have been signed from all affected parties that are impacted from the restriction.
- Any risk management plan where contaminant concentrations exceed the Alberta Tier 1 or Tier 2 guidelines within 1 metre of the surface unless all limitations associated with the risk management plan are already incorporated into the land use bylaw, municipal development plan, area structure plan, area redevelopment plan, any other relevant policies that will restrict these activities on the facility.
- Any risk management plan on residential land use that requires active engineered controls or engineered
 controls that will require ongoing maintenance, management or monitoring to manage risk to any receptor
 or pathway.
- Any risk management plan that includes features or management options that are not permitted under any other regulations.
- Any risk management plan where failure of the plan would result in sudden or immediate exposure of an
 ecological or human receptor.

4.10 Application Section 10: Remediation Certificate

The information provided in this section must reflect the parcel of land on which the release occurred and was remediated. Any previous remediation or reclamation certificates, where applicable, issued on the site must also be identified, along with the date they were issued, to ensure the Department takes existing regulatory closure instruments into consideration when reviewing applications for a new remediation certificate.

4.11 Application Section 11: Required Attachments

All required information must be submitted to the Department as attachments to the application, or included as part of submitted reports. Appendix A of the application form must be completed in conjunction with this section to provide a summary of reports and required attachments in an easily referenced manner.

4.12 Application Section 12: Environmental Professional Declaration

The Limited Remediation Certificate Application Form (AEP, 2019a) must be signed by a member in good standing of one of the seven professional regulatory organizations (listed in Section 5.3 of this guide) who meets the qualifications for work experience and insurance.

4.13 Application Section 13: Applicant Declaration

This section must be agreed to and signed by the applicant or a representative of the company, if a company is the applicant. An agent or consultant (e.g., environmental professional) cannot sign the applicant declaration unless they are the applicant.

5. Application Process

5.1 Application Fees

The remediation certificate application fee for AEP regulated activities is \$1000. Alberta Environment and

Parks will return applications not accompanied with the fee, without reviewing the application. Alberta

Environment and Parks will not refund the application fee for deficient applications, subsequent applications

with corrected deficiencies will require new application fees. Applications will be considered incomplete if

significant additional information, documentation or clarification is required and will be returned to the

applicant without review. All remediation certificate applications will be reviewed for completeness and may

be subject to other reviews or audits before or after the certificate is issued. The remediation certificate

application fee will be used to fund Alberta Environment and Parks external costs of conducting audits on sites

that receive remediation certificates.

Acceptable methods of application fee submission are by cheque (made payable to Minister of Finance), VISA

or MasterCard.

5.2 Application Submissions

For AEP regulated activities send the application to:

Remediation Certificates

Alberta Environment and Parks

Regulatory Approvals Centre

Petroleum Plaza South Tower, Fifth Floor

9915-108 Street

Edmonton Alberta T5K 2G8

For electronic submissions: RAC.environment@gov.ab.ca (Indicate "Remediation Application" in the subject

line of the email.)

5.3 Role of the Environmental Professional

Alberta Environment and Parks is placing more reliance on professional reclamation and remediation

practitioners to conduct work in a competent manner. The Competencies for Remediation and Reclamation

Advisory Committee's Recommendations Report (AENV, 2006) provides competency tables for various

activities such as a Phase 1 ESA and remediation and reclamation.

The Environmental Professional Declaration in the Limited Remediation Certificate Application Form (AEP, 2019a) and supporting documents may be signed by a member in good standing of one of the following professional regulatory organizations:

- Alberta Institute of Agrologists;
- Alberta Society of Professional Biologists;
- Association of Professional Engineers and Geoscientists of Alberta;
- Association of Science and Engineering Technology Professionals of Alberta;
- Association of the Chemical Profession of Alberta;
- College of Alberta Professional Foresters; and
- College of Alberta Professional Forest Technologists.

The member must have a minimum of five years verifiable experience in remediation or reclamation relevant to the competencies table contained in the Competencies for Remediation and Reclamation Advisory Committee's Recommendations Report (AENV, 2006). The member (or their employer) must carry and maintain professional liability insurance (errors and omissions).

For more information on the professional and ethical responsibilities of the members, see the Joint Practice Standard developed by the seven professional regulatory organizations in consultation with the Alberta Government, on Alberta Environment and Parks website.

5.4 Role of the Applicant

The Applicant must ensure that the information presented in the Limited Remediation Certificate Application Form (AEP, 2019a) is complete and correct. All requested information must be disclosed within the application form. Knowingly providing false information is an offence under the EPEA and is subject to legal penalty.

5.5 Remediation Certificate Content

Remediation Certificates will be issued to applicants that meet the requirements of the program, and will contain the following information:

- The applicant's name;
- a map, with references to legal boundaries of the land, showing the remediated area (for examples, see Appendix A);
- a diagram, including cross-sections, showing the top of remediation and the base of remediation within the remediated area;
- the substance(s) that are the subject of the remediation certificate;
- the remediation guidelines and associated land use(s) to which the substance(s) were remediated;
- the date the remediation was completed;
- the date the remediation certificate was issued; and,
- any terms or conditions that the Director or inspector considers appropriate.

5.6 Public Disclosure of Information

All application information in support of the remediation certificate, including the application, is designated public information under the EPEA. All submitted documents and correspondence will be publicly available through an on-line document publishing application: www.esar.alberta.ca

In April 2005, through a legislative amendment to the Disclosure of Information Regulation under the EPEA, the Government of Alberta made additional types of information and records routinely available and accessible to the public.

Notably, all scientific and/or technical information, studies, reports, and/or records submitted to Alberta Environment and Parks as required by Part 5 of the EPEA, as well as correspondence between Alberta Environment and Parks and the submitter in regard to same, are also available to the public.

Alberta Environment and Parks has been receiving scientific/technical documentation as required by the EPEA, marked "Privileged", "Privileged and Confidential", "Without Prejudice", "Proprietary" or similar wording. If a submitter wishes to claim privilege on portions of a document, the submitter must again provide a written rationale to the Director, as well as identify and separate the parts of the document for which privilege is being claimed. The Director will take the rationale into consideration. The remainder of the document will be made public, as provided in Ministerial Order 02/2010.

Section 35(4) of the EPEA permits certain persons to ask the Director to maintain the confidentiality of information in a record, where the information relates to a trade secret, process, or technique. At the time the record is submitted to Alberta Environment and Parks, a written request must be provided, for the Director's

consideration, detailing the reasons why the information should be kept confidential and not be disclosed. The submission must provide a rationale for each of the following four points.

A "trade secret, process or technique" means information, including a formula, pattern, method, technique and process:

- a) that is used, or may be used, in business or for any commercial purpose;
- b) that derives independent economic value, actual or potential, from not being generally known to anyone who can obtain economic value from its disclosure or use;
- c) that is the subject of reasonable efforts to prevent it from becoming generally known; and,
- d) the disclosure of which would result in significant harm or undue financial loss or gain.

The Director will consider the person's submission and notify the person of the final decision.

6. Appeal Process

Appeals are formal complaints about the regulatory decision of a government official. Appeals under the EPEA or the Water Act are directed to the Environmental Appeals Board.

Section 91(1) (l) of the EPEA provides rights to any person who receives notice of the issuance, amendment or cancellation of a certificate to submit a notice of appeal where the Director or an inspector issues, amends or cancels a remediation certificate. Furthermore, Section 91(1) (l.1) of the EPEA provides rights to any person who receives notice of the refusal to submit a notice of appeal where the Director or an inspector refuses to accept an application of a remediation certificate or refuses to issue a remediation certificate.

As per Section 91(4) (c) of the EPEA, a notice of appeal must be submitted to the Environmental Appeals Board within 30 days of receipt of the notice of the decision appealed from.

For more information on the appeal process go to www.eab.gov.ab.ca

7. Audit Process

The Department will review each remediation certificate application for completeness and compliance with

the Remediation Regulation (GOA, 2019) and Alberta Tier 1 and/or Tier 2 guidelines. The Department will

conduct audits on approximately 10 percent of certified area(s) to determine if the area(s) have been properly

remediated. The audits are necessary to provide assurance to the public that the applicant has remediated the

certified area as declared in the application for a remediation certificate. Audits also provide assurance to the

Department that the application information can be relied on for issuance of remediation certificates. The two

types of audits that will be conducted are desktop audits and field audits.

Audits will be conducted throughout the year. A certified area may be audited within three years following

issuance of a certificate. If an area fails an audit, the remediation certificate may be cancelled, and the fee not

refunded.

Original signed by:

Date: December 19, 2018

Karen Wronko
Executive Director, Land Policy Branch

Environment and Parks

8. References

Alberta Environment (AENV), 2006. Competencies for Remediation and Reclamation Advisory Committee: Recommendations Report.

Alberta Environment (AENV), 2007a, as amended. Alberta Tier 1 Soil and Groundwater Remediation Guidelines.

Alberta Environment (AENV), 2007b, as amended. Alberta Tier 2 Soil and Groundwater Remediation Guidelines.

Alberta Environment (AENV), 2012, A Guide to Remediation Certificates for Contaminated Sites.

Alberta Environment and Parks (AEP), 2016a. Alberta Environmental Site Assessment Standard.

Alberta Environment and Parks (AEP), 2016b. Alberta Exposure Control Guide.

Alberta Environment and Parks (AEP), 2017a. Alberta Risk Management Plan Guide.

Alberta Environment and Parks (AEP), 2017b. Guidance for Selecting Toxicity Reference Values for Alberta Tier 1 and Tier 2 Soil and Groundwater Remediation Guidelines.

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Alberta Environment and Parks (AEP), 2019c. Alberta Tier 2 Compliance Letter Guide.

Alberta Environment and Sustainable Resource Development (ESRD), 2013. Phase 2 Environmental Site Assessment Checklist.

Alberta Environment and Sustainable Resource Development (ESRD), 2014. Contaminated Sites Policy Framework.

Government of Alberta, 1993. *Environmental Protection and Enhancement Act*. Revised Statutes of Alberta 2000, Chapter E-12, current as of March 31, 2017. Document available online at www.qp.alberta.ca

Government of Alberta (GOA), 1993. Release Reporting Regulation. Alberta Regulation 117/1993 with amendments up to and including Alberta Regulation 136/2018, current as of June 28, 2018. Document available online at www.qp.alberta.ca

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Government of Alberta (GOA), 2014. Contaminated Sites Management: Subsoil Salinity Tool. Retrieved from https://open.alberta.ca/dataset/contaminated-sites-management-subsoil-salinity-tool

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