

# Alberta Environment Updates on Remediation and Reclamation Initiatives

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# *Outline*

- New and Updated Guides, Codes of Practice
- Remediation Certificate Program
- Record of Site Condition Form
- Electronic Site Assessment Repository (ESAR)
- Draft Reclamation Criteria
- Summary

# *Guidance Documents*

- Revised Alberta Tier 1 and Tier 2 Guidelines
- Revised Code of Practice for Land Treatment of Soil Containing Hydrocarbons
- Code of Practice for Pits – deadline to convert from an approval to a CoP registration extended to November 1, 2009 – amending the Activities Designation Regulation
- Alberta Environmental Site Assessment Guidelines – draft
- Soil Monitoring Directive - draft



# ***Remediation Certificate Program***

- Voluntary certificate program
- Commences early 2009 for petroleum storage tank sites
  - Summer 2009 for upstream oil and gas sites
- Incentive to remediate
- Provides certainty for proponent if standards change
- Provides closure of liability after 10 years against changing remediation standards

# *Scope of Remediation Certificate*

- Certificate issued for remediated area only, not site
  - Surveyed coordinates of remediated area
  - Depth or zone of remediation
- Certificate issued for remediated substance(s)
- All substances in a release must be remediated



# ***Eligibility for a Remediation Certificate***



**Remediated to meet Tier 1 or 2  
Eligible for Remediation Certificate**

**Not Remediated  
No Remediation Certificate**





# ***Zone of Remediation***





# ***Eligibility for a Remediation Certificate***





# ***Third Party Risk Management Plan Agreement***

- Developed for residential, commercial and industrial end land uses where offsite contamination is present
- Affected third parties must be offered remediation
- If third parties do not want to proceed with remediation, must agree to a risk management plan
- Form developed for applicant and affected third parties to sign

# ***Requirements for a Remediation Certificate***

- Application information for PST sites:
  - Substance release information
  - Estimated center of source and geodetic depth
  - Dimension and volume of source
  - Exposure pathways on site
  - Offsite information



# *Requirements for a Remediation Certificate*

- Application requirements:
  - Receptors and pathways
    - Water wells, surface water bodies, etc.
  - Remediation land use criteria used
    - Current and future zoning
  - Remediation process
    - Waste management facility: m<sup>3</sup>
  - Remediation criteria used
    - Must be compliant with AB Tier 1 or Tier 2

# ***Attachments***

- Map with surveyed coordinates
- Diagram showing cross section of top and base of remediation
- Land title certificate
- Phase 1 ESA, Phase 2 ESA reports
- Borehole logs
- Lab analytical data
- Risk management plan & Third Party Risk Management Plan Agreement



# ***Application Signatures***

- Applicant Declaration
- Professional Declaration: sign off required
  - Six professional regulatory organizations
    - ACPA, AIA, APEGGA, ASPB, CAPF & CAPFT
  - Minimum of 5 years verifiable experience in remediation relative to the Competency Tables
  - Carry errors and omissions insurance coverage

# ***Audits of Certified Sites***

- Application fee of \$1000 used to fund audit program
- Approximately 10% of certified sites audited
- Environmental consultant will be hired to conduct desktop audits and field audits
- Failed audits or substantiated complaints may result in cancelled certificate



# ***Program Reporting***

- Program performance measures will be posted on Alberta Environment's webpage
- Application information will be routinely disclosed
- Applications and certificates will be publically available on Alberta Environment's ESAR database

# ***Record of Site Condition***

- Applies to all industry sectors: upstream oil and gas, approved facilities, PST sites, etc.
- Must be submitted with all Phase 2 ESAs, remediation reports, risk management plans as of May 1, 2008
- Section 8 Declaration and other parts of the form have been revised
- Form streamlined to identify potential contaminants of concern



# ***RSC Information Requirements***

- List all potential contaminants of concern
- Highest concentration in soil and/or groundwater that is still present at the site
- For release reporting at PST sites and other sites concentrations are updated as information is obtained, or remediation occurs
- For reports in upstream reclamation certificate applications, concentrations must be compliant with AB Tier 1 or Tier 2

# ***RSC Submission Policy***

- Requirement for all Phase 2 ESA, remediation reports and risk management plans submitted after May 1, 2008
  - Not based on when the work was done
- Option to delay submission of RSC until after revised Declaration released
  - RSC form still required when new version released



# ***Professional Sign Off on RSC Declaration***

- Professional sign off required on RSC for upstream oil and gas sites, PST sites
- Qualified members of all six PROs can sign off
- Work can be done by competent practitioners or professionals

# ***Record of Site Condition Form***

- A User Guide is being developed
- Form will be on web-based server in fall 2008 for electronic submission of form and report and risk management plan
- Information will be publicly available on ESAR



# ***Environmental Site Assessment Repository (ESAR)***

- Office of the Auditor General identified need for greater transparency and public accessibility for information on potentially contaminated and contaminated sites
- ESAR is a publically accessible database
- Site data (Phase 1 ESA, Phase 2 ESA, Record of Site Condition) available by land location
- Initially will include PST files and contaminated site files when launched by end of December 2008

## Environment

Alberta.ca > Environment > ESA Search

Search Form

Map Search

### Alberta Township System (ATS) Search

W - - - - - Search ATS

Format: MER-RGE-TWP-SEC-[QTR]-[LSD]

[ ] denotes that the quarter section and legal subdivision are optional.

### Plan Block Lot (PBL) Search

### ESA Results

### ESA Document Results

### General Help

The main part of this search page is organized into panels on the left.

ESA searches can be performed by Alberta Township System (ATS) or by Plan Block Lot (PBL). Click on a heading on the left to open up the panel for your desired search type.

ESA site results and ESA document results are also organized in panels.

### ATS Help

The Alberta Township System (ATS) format may be used to search for an ESA:

MER - (Meridian)	(west of the 4th, 5th or 6th)
RGE - (Range)	(1-30)
TWP - (Township)	(1-126)



The ESA marker represents an approximate location of a site where the Government of Alberta has received scientific and/or technical information. The ESA marker is an arbitrary, 40 meter diameter circle centered on the property for which this information is attached. For locations or other site information, see the document results table.

Search Form Map Search

ATS

PBL

Plan

Block

Lot

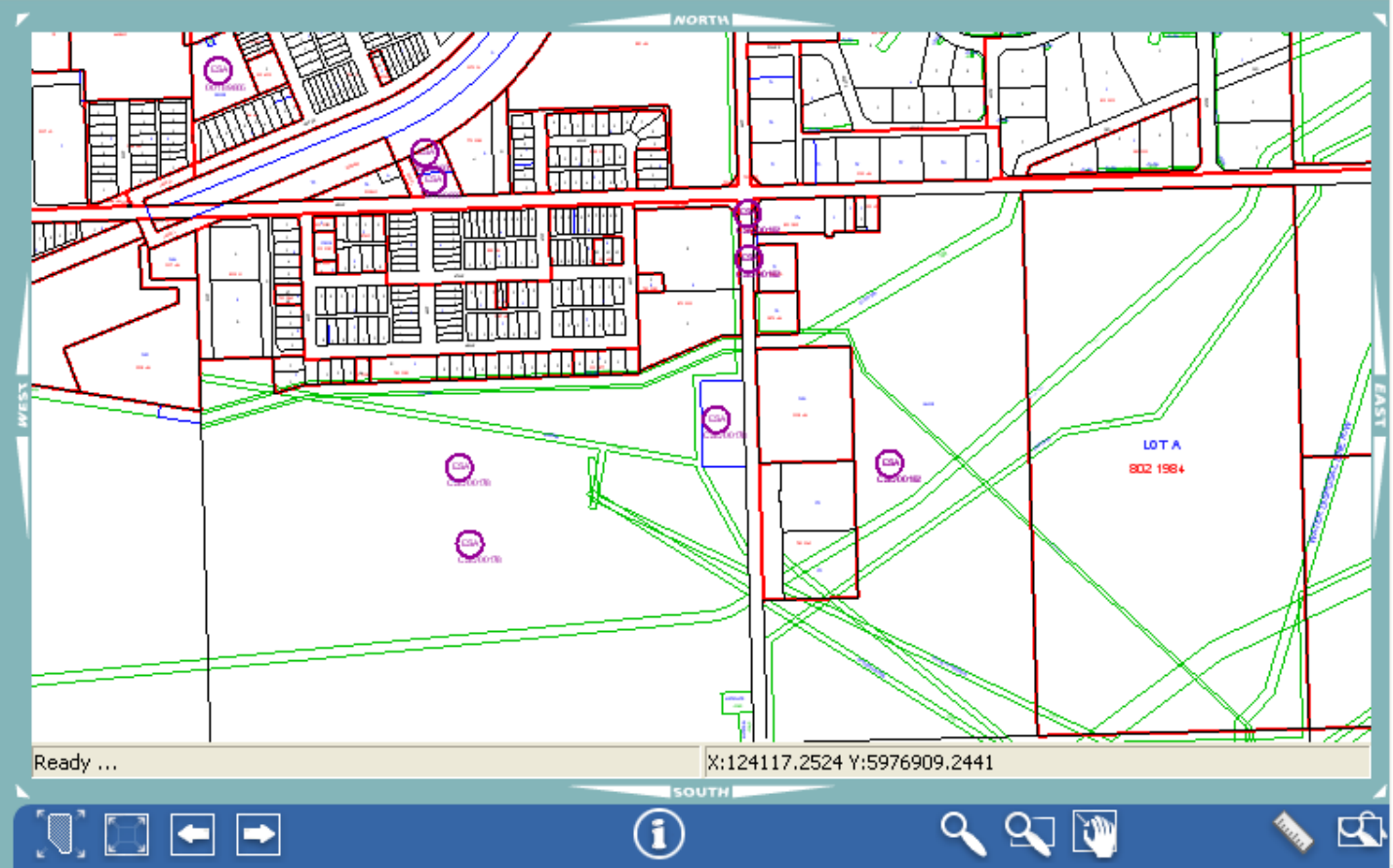
Search

Address

Place Name

Coordinate

Help with Map



# ***Reclamation Criteria Advisory Group (RCAG)***

- Draft reclamation criteria developed by multi-stakeholder committee
- Draft 2009 reclamation criteria field tested in summer 2008
- Assessors to provide data sheets and survey on use of criteria
- RCAG to review field and survey data in early 2009 and finalize criteria



# *Summary: What's Next*

- Remediation certificates available for PST sites early 2009 and upstream oil and gas sites summer 2009
- Record of Site Condition form will be electronically available in fall 2008
- ESAR launch expected by year end
- Draft Reclamation Criteria expected to be finalized in 2009