



**Update Report on Alberta Environment  
and Sustainable Resource Development's  
Upstream Oil and Gas  
Reclamation Certificate Program**

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Web Site: <http://aep.alberta.ca/lands-forests/land-industrial/programs-and-services/reclamation-and-remediation/upstream-oil-and-gas-reclamation-and-remediation-program/default.aspx>

Update Report on Alberta Environment and Sustainable Resource Development's Upstream Oil and Gas Reclamation Certificate Program, March 31, 2014.

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## 1. Introduction

The Province of Alberta introduced reclamation certificates in 1963 to promote reclamation of industrially disturbed private lands. The program was expanded to include public lands in 1978 and revised in 2003 to increase the province's ability to handle certificate applications while maintaining environmental standards.

For over 50 years, Alberta has established itself as a world leader in reclamation by meeting the challenges posed by a broad range of industrial disturbances throughout different landscapes and soil types. Over time, new research and technologies have improved construction practices, soil conservation measures and revegetation techniques leading to continually improving reclamation results. Today, reclamation results are gauged against standards or reclamation criteria that reflect these improvements and are grounded in the concept of equivalent land capability – that potential uses of the land following reclamation are similar to, but may not necessarily be the same as that which existed prior to the industrial activity taking place.

## 2. Alberta's Upstream Oil and Gas Reclamation Certificate Program

The goal of Alberta's Upstream Oil and Gas Reclamation Certificate Program is to return specified land used for oil and gas development to a productive state. Part 6 of the *Environmental Protection and Enhancement Act* requires all specified land to be reclaimed and obtain a reclamation certificate. Specified land includes land that is being or has been used or held for or in connection with the construction, operation or reclamation of an oil or gas well, battery, oil production site, and pipeline.

The company that owns the well, facility or pipeline submits an application for a reclamation certificate. Prior to April 1, 2014, these were submitted to Environment and Sustainable Resource Development (ESRD). However, effective April 1, 2014, the Upstream Oil and Gas Reclamation Certificate Program is under the jurisdiction of the Alberta Energy Regulator (AER) (formerly the Energy and Resource Conservation Board). Each application must include environmental site assessments to determine presence or absence of contamination and a report detailing how contaminants, if identified, were remediated and a detailed site assessment illustrating how surface issues pertaining to landscape, soils, and vegetation were reclaimed. If all standards are met, the company is issued a reclamation certificate.

### 2.1 Program Details

Alberta's Upstream Oil and Gas Reclamation Certificate Program is designed to improve the efficiency of issuing reclamation certificates while maintaining a commitment to environmental assurance, accountability, and open communication with stakeholders.

#### ***Reclamation Certificate Applications***

ESRD accepts reclamation certificate applications (applications) for private land (White Zone) or public land (Green Zone). Applications must contain information on the status of subsurface contamination and surface conditions and show that private landowners/occupants have received copies of all documentation related to land reclamation and remediation. The application fee for a reclamation certificate application is \$700.

#### ***Routine vs. Non-Routine Applications***

All applications are categorized as routine or non-routine.

Routine applications are reviewed for completeness, appropriate signatures, inclusion of required documents, and landowner complaints. Routine applications receive a reclamation certificate after passing the completeness review, while incomplete applications are refused. Applications with unresolved complaints will become non-routine.

Non-routine applications are reviewed for completeness prior to regulatory review by an environmental protection officer. The review ensures compliance with remediation guidelines and reclamation criteria. Non-routine applications that pass both completeness and regulatory reviews receive a reclamation certificate. Applications are refused if they are incomplete, inconsistent, or do not meet remediation guidelines or reclamation criteria.

### **Audits**

In order to ensure that companies responsible for reclaiming abandoned sites have complied with all of the province's reclamation and remediation standards, ESRD conducts randomly selected field audits on approximately 15 percent of all sites that have received a reclamation certificate. Sites are eligible for audit up to three years after a reclamation certificate is issued. The field audit may focus on either surface reclamation or contamination.

Surface reclamation audits include an inspection of the soil for topsoil depth, compaction, admixing of surface soil and subsoil, and site topography. The environmental protection officer also assesses the vegetation cover, plant species compatibility with adjacent land, and inspects the site for the presence of weeds, rocks, and/or debris.

Contamination audits include soil sampling at depth to obtain samples from areas of potential contamination such as: well centers, drilling waste disposal areas, flare pits, random locations on site, as well as background samples from undisturbed areas. The samples are submitted to an environmental laboratory for analysis.

Reclamation certificates may be cancelled based on the results of an audit. Additional remediation and/or reclamation work will be required. If a reclamation certificate is cancelled, the operator must re-apply with a new application and fee.

### **Complaints**

ESRD responds to all complaints received regarding reclamation activities on private and public land. An *Upstream Oil and Gas Facility Complaint Form* has been developed to assist landowners or occupants in filing a complaint. Complaints can be submitted at any time during construction, operation, reclamation or following reclamation of a site. A substantiated complaint may lead to the cancellation of a reclamation certificate if the certificate was issued after the program change in October 2003. The *Upstream Oil and Gas Facility Complaint Form* may be found at: [https://www.aer.ca/documents/liability/Complaint\\_form.pdf](https://www.aer.ca/documents/liability/Complaint_form.pdf) or

### **Liability Period**

The industry liability period for surface reclamation issues (topography, vegetation, soil texture, drainage etc.) is 25 years and the company is required to resolve any reclamation issues that arise within the 25-year period. The liability reverts to the government after the industry liability period has expired. Liability for contamination issues remains with the company in perpetuity.

## **Professional Assurance**

Since January 1, 2008, professional sign off has been required on all land remediation and reclamation work on upstream oil and gas sites. Members of recognized professional organizations are eligible to sign off if they have a minimum of five years of experience in remediation and reclamation as per the Competencies for Remediation and Reclamation Advisory Committee's *Recommendations Report* (AENV 2006) which can be viewed at <http://aep.alberta.ca/lands-forests/land-industrial/programs-and-services/reclamation-and-remediation/competencies-for-reclamation-and-remediation.aspx> and carry errors and omissions insurance. The professional organizations include:

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

For all remediation and reclamation work completed after January 1, 2008, a professional must sign a *Professional Declaration for Reclamation Certificate Applications form*. The form must be signed when the following are completed: Phase 1 environmental site assessment, compliance option checklists for drilling waste disposal, Phase 2 environmental site assessment, remediation and confirmatory sampling, and reclamation detailed site assessments.

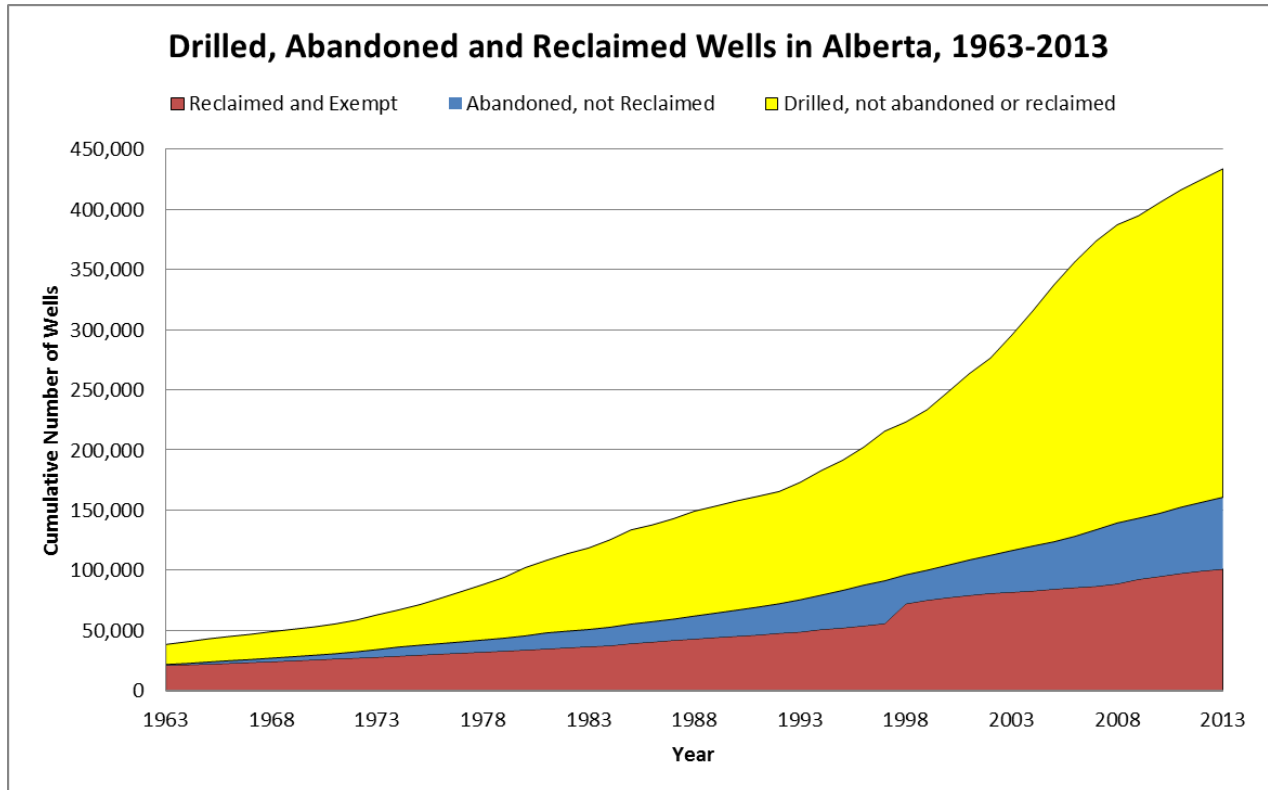
## **2.2 Performance Measures**

Performance measures help to evaluate the reclamation certificate program outcomes. The performance measures include:

- 1) Ratio of certified upstream oil and gas wellsites and production wells to abandoned upstream oil and gas wells

This measure compares the number of abandoned upstream oil and gas wells on sites that are awaiting reclamation or submission of the site evaluations to government, to the number of reclamation certificates for private and public land that have been previously issued.

The program goal is to increase the number of abandoned sites that are reclaimed each year. Reclaiming oil and gas sites in a timely manner, after a well is no longer productive, will help to reduce impacts on the land.



2) Percentage of applications receiving a reclamation certificate

This measure indicates the percentage of reclamation certificate applications that undergo a successful desktop review and receive a reclamation certificate. The reclamation certificate application pass rate indicates the quality of the applications submitted and therefore, the percentage of sites that have achieved ESRD's remediation requirements and reclamation criteria.

The program goal is to work with industry to increase the number of applications that meet the reclamation and remediation requirements necessary to receive a reclamation certificate.

**Reclamation Certificates: April 1, 2013 to March 31, 2014**

	Applications processed	Applications certified	Applications refused	Application pass rate
Private Land	990	983	7	99.3 %
Public Land	547	535	12	97.8 %

3) The percentage of randomly selected sites certified following program changes in October 1, 2003 that pass the audit.

This measure indicates the percentage of randomly selected certified sites audited by ESRD that have met the province's reclamation and remediation requirements. The number of audits is based on the number of sites certified in the previous fiscal year. Approximately 15 percent of upstream oil and gas sites that receive a reclamation certificate under the Upstream Oil and Gas Reclamation Certificate Program will be audited.

This performance measure provides assurance that certified sites are meeting the province's remediation requirements and reclamation criteria. The number of surface and contamination audits done in 2013 – 2014 was fewer than in previous years due to the Upstream Oil and Gas Reclamation Certificate Program transition from ESRD to the Alberta Energy Regulator.

The goal of the program is to work with industry to increase the number of oil and gas sites that meet the reclamation and remediation requirements necessary to pass the field audit.

**Surface Audits: April 1, 2013 to March 31, 2014**

	Total wellsites certified	Surface reclamation audits	Outcome following audit		
			Upheld	Cancelled	Decision Pending*
Private Land	983	17 (1.7 %)	14	3	0
Public Land	535	29 (5.4 %)	22	0	7

\* Review of these audit reports had not been finalized.

**Contamination Audits: April 1, 2013 to March 31, 2014**

	Total wellsites certified	Contamination audits	Outcome following audit		
			Upheld	Cancelled	Decision Pending*
Private Land	983	0 (0 %)	0	0	0
Public Land	535	0 (0 %)	0	0	0

\* Review of these audit reports had not been finalized.

**4. Conclusion**

The goal of Alberta's Upstream Oil and Gas Reclamation Certificate Program is land used for oil and gas development being restored to a productive state. ESRD is responsible for overseeing the development of policies, guidelines and documentation used to administer the program. The Department is committed to ongoing improvement of the program through regular review of performance indicators and consultation with stakeholders.

**Effective April 1, 2014, the Upstream Oil and Gas Reclamation Certificate Program is under the jurisdiction of the Alberta Energy Regulator (AER).**