

Book Environmental Assessments Now To Avoid Construction Delay in 2023

With the weather window closing for environmental field work, do you have the data you need for a smooth regulatory journey over the winter months?

Federal

Liquefied Petroleum Gas (LPG) Underground Inventories in Canada Impact Assessment Agency
Hydrogen Production in Energy Futures 2021 Report

Alberta

New Edition of Manual 001: Facility and Well Site Inspections
Directive 089: Geothermal Resource Development
Excluding Domestic Use Aquifer Based on Municipal bylaws
The Aboriginal Consultation Office Annual Report 2021-2022
Supplemental Guidance on Site-Specific Risk Assessments
2022 Edition of the Alberta Tier 1&2 Soil and Groundwater Remediation Guidelines

British Columbia

Testing Well Decommissioning Submissions
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Multi-Year Study to Look at Methane Emissions
Canada Energy Regulator (CER) Commitment to Aboriginal Liaison Program

Liquefied Petroleum Gas (LPG) Underground Inventories in Canada Impact Assessment Agency

The Canadian Energy Regulator has changed the format of its [LPG underground inventory statistics](#). In addition to the previous annual summary, the monthly download now provides historical inventory data from 2000 to the present. A graphical representation of regional propane and butane inventories is now displayed in an interactive format. Data for the month of June was revised due to a reporting revision and is reflected in the new excel file as of 19 July 2022. The data shows that overall underground inventories of propane decreased by 22% compared to July of 2021, and butane inventories are up 15%.

Hydrogen Production in Energy Futures 2021 Report

[Canada's Energy Futures 2021 report \(EF2021\)](#) has a dedicated section on hydrogen supply and demand. Hydrogen plays a key role in the reduction of unabated fossil fuels in the EF2021 Evolving Policies Scenario, in which action to reduce greenhouse gas emissions from our energy system continues to increase at a pace similar to recent history both in Canada and globally. Hydrogen offsets natural gas use in buildings and industrial sectors, and diesel fuel used by heavy duty vehicles for freight transportation.

The snapshot explores the processes and fuels used to produce hydrogen in our Evolving Policies Scenario, and what those results mean for Canada's transition to a low-carbon economy. Interest has increased in low-carbon hydrogen as an important fuel in Canada and the world's transition to a low-carbon economy. Many countries, including Canada, have released hydrogen strategies. Canada's Hydrogen Strategy lays out an ambitious framework for actions that aim to position hydrogen as a tool to achieve the federal government's goal of net-zero greenhouse gas emissions by 2050. In EF2021, most of the hydrogen produced by electrolysis uses renewable electricity. In 2040, the amount of natural gas and electricity used for low-carbon hydrogen production becomes a noteworthy portion of the total demand for those fuels in Canada.



New Edition of Manual 001: Facility and Well Site Inspections

On 16 August 2022, Alberta Energy Regulator (AER) released a new edition of [Manual 001: Facility and Well Site Inspections](#) replacing the 2010 edition. Manual 001 is a reference document for AER staff when conducting facility and well site compliance activities. Industry may also use it as a source for facility and well site inspections and as a guide to inform their compliance management systems. Manual 001 is not an exhaustive inventory of all facility and well site requirements. Industry is accountable for understanding and complying with all relevant requirements. The manual is allocated into four segments: Gas Facility, Oil Facility, Waste Facility, and Well Site. Within each section, noncompliance statements are provided, along with the relevant regulatory references.

Manual 001 has been updated as follows:

- Added noncompliance statements for the specified enactments (e.g. *Public Lands Act*, *Water Act*).
- Added or removed noncompliance statements to reflect current AER requirements and energy resource enactments (e.g. [Directive 058](#): Oilfield Waste Management Requirements for the Upstream Petroleum Industry, *Oil and Gas Conservation Act*).
- Removed the low- and high-risk ratings to align with AER [Integrated Compliance Assurance Framework](#) and [Manual 013](#): Compliance and Enforcement Program.
- Formatted the manual to meet our current publication standards.

Directive 089: Geothermal Resource Development

The Government of Alberta proclaimed the [Geothermal Resource Development Act](#). Under the Act, the Alberta Energy Regulator (AER) has the authority to regulate the safe, efficient, and responsible development of Alberta's geothermal resources. [Directive 089: Geothermal Resource Development](#) has been issued to complete the regulatory framework for geothermal resource development. The rules and Directive 089 are effective 15, August 2022 and set out the requirements that industry must follow throughout the entire life cycle of a geothermal development. The directive is only applicable when developing geothermal resources below the base of groundwater protection. The rules and Directive 089 introduce requirements and processes unique to geothermal energy and include reference to applicable oil and gas regulatory instruments.

Feedback from various stakeholders and rights holders, including Indigenous communities, industry, and environmental groups was considered when creating the directive. *The Oil and Gas Conservation Rules (OGCR)* have been updated to align with the geothermal regulatory framework. The definition of oilfield waste in the OGCR has been updated to include waste from geothermal resource development. A new provision has been added to the OGCR that requires an application for amendment where a licensee intends to change a well licensed under the *Oil and Gas Conservation Act* to a geothermal well.

Excluding Domestic Use Aquifer Based on Municipal Bylaws

Alberta Environment and parks has released the [Guide to Excluding the Domestic Use Aquifer Based on Municipal Bylaw](#). This guide is in support of the Alberta Tier 2 Soil and Groundwater Remediation Guidelines and specifically addresses pathway exclusion for the Domestic Use Aquifer (DUA) within municipal boundaries. Under this guideline, it is now permitted to exclude the DUA pathway if there is a municipal bylaw in place that prevents access to groundwater to install drinking water wells and the person has fulfilled the requirements to demonstrate adequate protection, as outlined in the Guideline. This Guide outlines how a responsible party may exclude the DUA pathway based on municipal bylaw. It is intended to help responsible parties ensure they are submitting sufficient information for the regulator to review and approve their applications.

The Aboriginal Consultation Office Annual Report 2021-2022

In support of Indigenous Relations' work and improving transparency and outreach, the Aboriginal Consultation Office (ACO) has released its [2021-22 annual report](#). The annual report provides information about consultation application volumes and highlights the importance of natural resource development in Alberta's economic recovery, consultation with Indigenous communities, key statistics, and major initiatives. ACO provides consultation management services to government departments and agencies that have statutory and regulatory responsibilities related to the management of Crown land and natural resources. About 8,000 land and natural resource development applications was processed, leading to nearly 12,000 activities on Crown lands in Alberta in 2021-22 fiscal year.

Supplemental Guidance on Site-Specific Risk Assessments

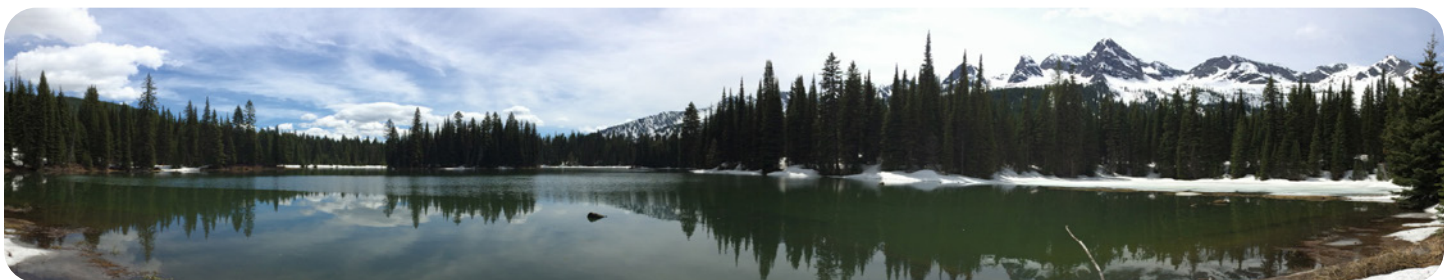
Alberta Environment and Parks (AEP) has released the [Supplemental Guidance on Site-Specific Risk Assessments in Alberta \(SSRA\)](#). The supplemental guidance document provides additional clarification on the requirements and expectations for completing site-specific risk assessments (SSRAs) for contaminated sites in Alberta. SSRA is one approach available under the Tier 2 Guidelines for consideration of site-specific conditions. Use of the guidance provided by this document will facilitate regulatory review and acceptance of the SSRA. This guidance will help responsible parties better understand the regulatory requirements for site closure under the Tier 2 site-specific risk assessment option.

2022 Edition of the Alberta Tier 1&2 Soil and Groundwater Remediation Guidelines

Alberta Environment and Parks (AEP) has released the 2022 edition of the [Alberta Tier 1 Soil and Groundwater Remediation Guidelines and the Alberta Tier 2 Soil and Groundwater Remediation Guidelines](#). AEP and the Alberta Energy Regulator will continue to accept applications for reclamation certificates and remediation certificates that are compliant with the 2019 edition of the Alberta Tier 1 and Tier 2 guidelines, if laboratory analytical data reports from Phase 2 environmental site assessments or confirmatory sampling events are dated on or before 1 January 2023. Laboratory analytical data reports dated 1 January 2023 or later must be compliant with the 2022 edition of the Alberta Tier 1 and Tier 2 guidelines.

This revision includes updates to the text to remove redundancy and better harmonize with other guidance documents within the Contaminated Sites Management Framework. These include

- Contaminated Sites Policy Framework
- Environmental Site Assessment Standard
- Alberta Site Specific Risk Assessment Guide
- Alberta Exposure Control Guide
- Alberta Risk Management Plan Guide



Testing Well Decommissioning Submissions

Effective immediately, the BC Oil and Gas Commission (Commission) is improving its [submission processes for well decommissioning](#) notification and post-job reporting. Well decommissioning is the process by which the well is permanently plugged and capped so further restoration activities can take place. The system will accommodate the significant increase in well decommissioning activities being performed by permit holders and is expected to result in quicker processing of well decommissioning submissions. It will also ensure well status changes are identified and captured. The Commission is seeking permit holder participation in a test of the enhanced submissions. Training and documentation will be provided. Participants will be asked to provide feedback on their experiences using the submissions and permit holder representatives are asked to contact the Commission, no later than 2 September 2022 to sign up. Testing is expected to begin in mid-September 2022 and continue for up to two weeks.

Commission Adopts New Security Management Regulation

The BC Oil and Gas Commission (Commission) has approved a new [Security Management Regulation](#) which applies to all oil and gas activity permit holders regulated by the Commission. Effective 1 June 2023, the regulation requires permit holders to comply with CSA Standard Z246.1 entitled “Security management for petroleum and natural gas industry systems” (the Standard). The purpose of the Standard is to provide a performance based and scalable approach to help companies evaluate and respond appropriately to security threats.

The regulation requires permit holders develop a Security Management Program to identify threats and risks on a continuing basis and manage them with appropriate mitigation and response measures. The regulation also requires permit holders to report security incidents and conduct training to ensure the program is up to date and responsive to current threats. The Standard was developed by technical experts and has been adopted at the national level by the Canada Energy Regulator in relation to federally regulated pipelines and oil and gas facilities. The Commission will be providing further information and engagement opportunities in advance of the effective date, to support permit holders in meeting these new regulatory requirements.

Multi-Year Study to Look at Methane Emissions

The BC Oil and Gas Commission (the Commission), in collaboration with the BC Government and the United Nations Environment Programme International Methane Emissions Observatory, has initiated a [multi-year study](#) to better understand the sources of methane emissions from B.C.’s upstream oil and gas sector. The methodology used for this new study, was developed through several BC Oil and Gas Methane Emissions Research Collaborative (BC MERC) projects. BC MERC is a joint initiative to support BC’s emissions targets and find ways to further reduce methane emissions. This work will help improve tracking of methane emissions and investigate sources of emissions identified from previous research initiatives.

The scope of this year’s research is to perform aerial surveys over a large sample of facilities and well sites to support further policy and regulatory development and implementation. Subsequent research is expected to include ground-based surveys in 2023 as well as additional aerial surveys in 2023 and 2024. The project is targeting to fly over at least 1,000 sites from all producing regions in northeast B.C. The field work is expected to begin mid-August 2022 and may continue throughout the fall.

Canada Energy Regulator (CER) Commitment to Aboriginal Liaison Program

The [Aboriginal Liaison Program](#) is an innovative partnership between regulators, government, and Northern BC First Nations. The program connects 16 First Nations with natural resource and emergency management government agencies. The broad objectives of the Aboriginal Liaison Program are to build relationships and understanding between First Nation communities and natural resources agencies. It encourages two-way communication and information-sharing with a focus on safety, environmental and emergency management, and restoration and reclamation activities.

The pilot project provides opportunity to transfer knowledge between communities and government across Northern B.C. The CER decision to turn the pilot into an additional 3-year commitment to the Aboriginal Liaison Program supports working relationships between the CER and participating First Nations.

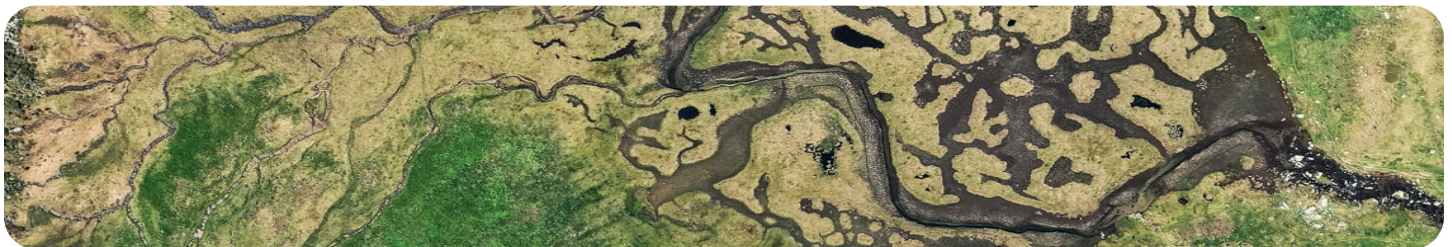
Did You Know?

Prepare For 2023 Reservoir Construction

Operators planning to construct freshwater or produced water reservoirs in 2023, should complete [site specific environmental field work](#) prior to the end of September. Completing field work in 2022, allows for regulatory applications to be processed over winter and provides you with the flexibility to construct next year during the ideal construction window, avoiding costly winter construction.

Don't forget that in March this year changes to Directive 055 and 058 shorten the application time for produced water ponds – don't hesitate to get in touch for more information!

Integrated Sustainability can help you screen and select a reservoir site as well as complete the necessary field work and permitting in 2022 to set your project up for success in 2023. For more information or assistance, please contact Tanya Cairns, VP Science & Consulting, at tanya.cairns@integratedsustainability.ca



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Integrated Sustainability acknowledges that our Vancouver Office is located on the unceded territories of the xʷməθkʷəy̓əm (Musqueam), Skwxwú7mesh (Squamish), and Selílwitlh (Tsilil-Waututh) Nations.

Furthermore, we also acknowledge that our Calgary Office is located on the traditional territories of the Blackfoot Confederacy (Siksika, Kainai, Piikani), the Tsuut'ina, the Îyâxe Nakoda Nations, the Métis Nation (Region 3), and all people who make their homes in the Treaty 7 region of Southern Alberta. We thank all these peoples for having cared for these lands and waters since time out of mind.