

UPSTREAM OIL AND GAS AUTHORIZATIONS AND CONSULTATION GUIDE

For requirements administered by:
Alberta Environment, Alberta Sustainable Resource Development, Alberta Energy, and
the Energy Resources Conservation Board

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1. Introduction

1.1. The Guide

The Upstream Oil and Gas Authorizations and Consultation Guide (the guide) is a central reference tool that identifies common authorizations—approvals, licences, dispositions, permits and registrations—required from Alberta Energy, the Energy Resources Conservation Board (ERCB), Alberta Environment (AENV) and Alberta Sustainable Resource Development (SRD) for the development of upstream oil and gas activities. The scope of the guide includes conventional and unconventional oil and gas developments and activities, including in situ oil sands but not including mineable oil sands projects.

Specifically, this guide focuses on authorizations required before the construction and operation phases and at the closure phase of projects. The guide does not deal with other aspects of the regulatory framework such as information reporting, inspections and monitoring.

The goal of this guide is to provide a general overview or “roadmap” of the upstream oil and gas regulatory framework in Alberta by describing the authorization and consultation processes at a high level and directing the reader to the appropriate regulatory instrument for additional details.

The guide is not intended to provide an exhaustive listing of the individual authorization and consultation requirements that are specific to a given activity. **The guide should not in any way be relied upon in substitution for the mandatory direction in the existing legislation, regulations, directives, codes of practice, information letters, and board or court decisions applicable to the development of upstream oil and gas activities; it is intended to be used as a general reference tool only.** Where there is a conflict between this guide and the legislation and documents previously cited, the latter prevail over the guide. In order to ensure full compliance with all legal requirements, users of the guide are advised to check the relevant legislation and documents prior to seeking approval for a specific activity.

After the introductory and overview sections, the guide presents authorization information from two perspectives. Section 3: Common Upstream Oil and Gas Activities lists seven common activities that industry undertakes, such as drilling a well, and summarizes the authorizations that are required for each. Section 4: Authorization Descriptions provides greater detail of each specific authorization.

1.2. Goals for Regulating Upstream Oil and Gas Activities

In regulating upstream oil and gas activity in Alberta, the Government of Alberta has three primary goals:

- protection of public safety,
- effective resource conservation and management, and
- protection of the environment.

To help meet these goals, Government of Alberta ministries, agencies, organizations and others oversee certain aspects of upstream oil and gas activity. These organizations and their primary roles and responsibilities relative to regulating upstream oil and gas activity are outlined in Section 1.3 Agencies Responsible for Authorizing Upstream Oil and Gas Activities.

1.3. Agencies Responsible for Authorizing Upstream Oil and Gas Activities

Figure 1: *Energy Industry Overview* illustrates the various entities the energy industry must connect with to develop upstream oil and gas resources. This section provides some overview information on the roles of provincial regulatory agencies and others.

The Government of Alberta's four agencies with primary authority for regulating upstream oil and gas activity in the Province:

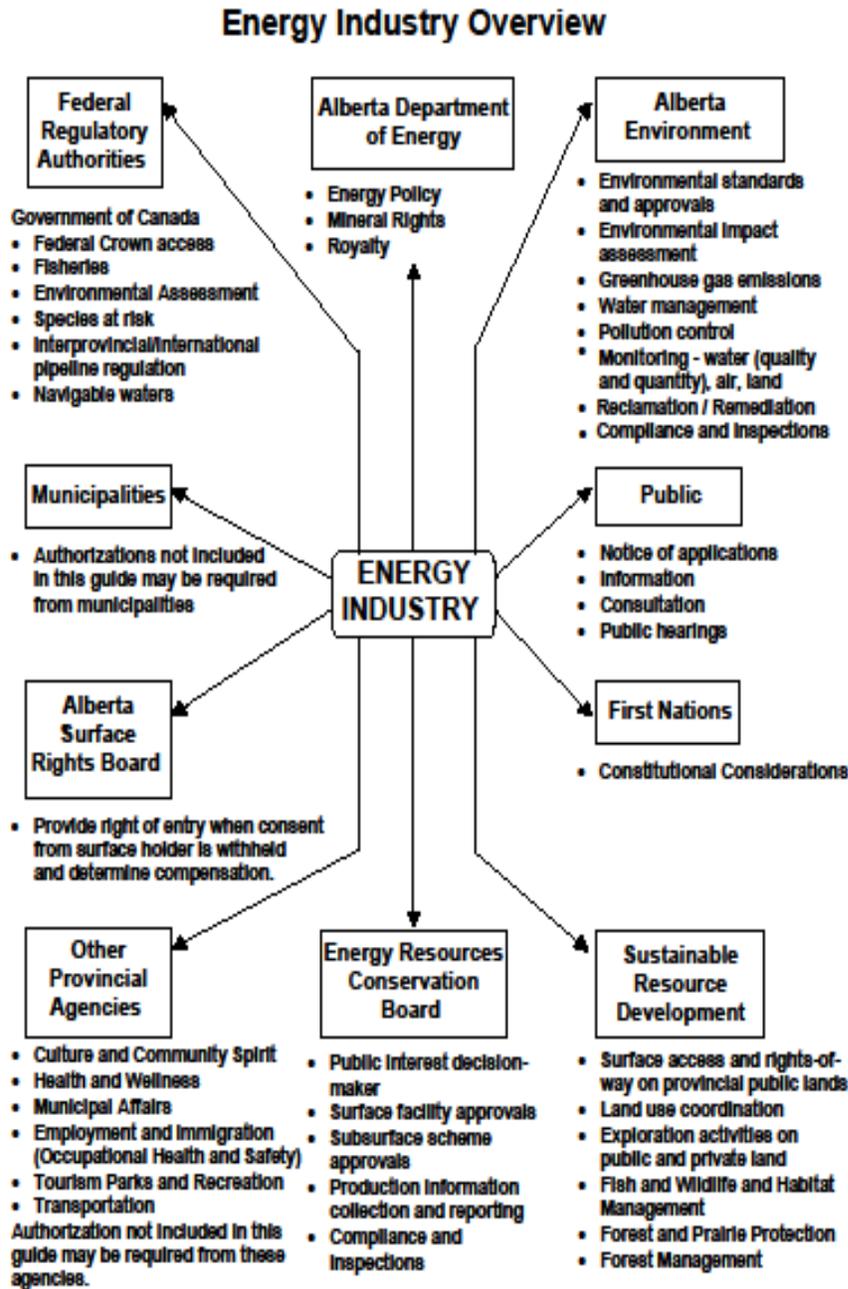
- Alberta Energy
- Energy Resources Conservation Board (ERCB)
- Alberta Environment (AENV)
- Alberta Sustainable Resource Development (SRD)

Additional agencies with responsibilities for regulating upstream oil and gas activity include:

- Other Provincial Regulatory Authorities
- Local Authorities (municipalities, counties, etc.)
- Federal Regulatory Authorities

The regulatory authority of each of these bodies is established by law. Legal authority over certain upstream oil and gas activities is derived from legislation. Specific authority for certain activities may be established by way of regulation. Certain specific standards, codes, directives and orders can be incorporated by reference into acts or regulations. Stakeholders should be familiar with all relevant legal authority, both broad and specific, when making application to the above regulatory bodies for approval of Upstream Oil and Gas activities.

Figure 1: Energy Industry Overview



Alberta Energy

Alberta Energy has primary authority for managing the development of provincially owned energy and mineral resources. Its goals are to:

- promote the development of Alberta's energy and mineral resources,
- recommend and implement energy and mineral related policy,
- grant and administer rights under disposition for exploration and development, and
- establish and administer fiscal regimes and royalty systems.

It has sole authority for establishing and administering the assessment and collection of energy resource revenues in the form of royalties, freehold mineral taxes, rentals and bonuses.

Energy Resources Conservation Board

The Energy Resources Conservation Board (ERCB) is an independent, quasi-judicial agency of the Government of Alberta that regulates the safe, responsible and efficient development of Alberta's energy resources. In support of this mandate, one of the ERCB's roles is regulating all upstream oil and gas activity throughout the lifecycle of a project. It issues well, facility and pipeline licences, in situ bitumen recovery scheme approvals and approvals related to resource reservoir management (including pooling, spacing, commingling, enhanced recovery, injection/disposal schemes); conducts information collection and dissemination; undertakes compliance assurance activities; and oversees the abandonment of facilities at the end of their lifecycle.

Alberta Environment

Alberta Environment is responsible for ensuring the protection of Alberta's environment and managing Alberta's water resources. In support of this mandate, Alberta Environment sets, monitors, and enforces environmental standards, pollution control measures, issues authorizations for the lifecycle (construction, operation and reclamation) of certain activities, administers and manages the environmental assessment process, as well as the reclamation and remediation of project sites following closure. Alberta Environment's management of Alberta's water resources includes the issuance of licences for water use and approvals for disturbances that may affect water.

Alberta Sustainable Resource Development

Sustainable Resource Development is responsible for managing Alberta's public lands, forests, fish and wildlife. With respect to the energy industry, Sustainable Resource Development is responsible for approving exploration activities on public and private land, administering surface land access and rights-of-way on most public land through the public land disposition process, ensuring reclamation is completed on public land, issuing reclamation certificates and auditing reclamation and remediation of certified sites on public lands. The department also manages for species at risk, other fish and wildlife, and forest operations.

Other Provincial Regulatory Authorities

In addition to the four primary agencies above, the following other provincial regulatory authorities provide oversight for some aspects of upstream oil and gas activity. This guide is not intended to address these provincial agency regulatory requirements.

These boards and agencies include but are not limited to the following:

- **Alberta Surface Rights Board**: The Alberta Surface Rights Board is an independent, quasi-judicial agency of the Government of Alberta. The Surface Rights Board may provide right of entry for well sites and pipelines, onto any land except for the Métis Settlement Land and federal land where the surface land holder has not provided consent and a permit has been obtained from the ERCB. The Surface Rights Board will determine compensation where agreement has not been reached between industry and the land holder through fair and timely hearings or voluntary dispute resolution. It also provides an option for voluntary industry-landholder agreements to be registered as a board order.
- **Environmental Appeals Board**: The Environmental Appeals Board is an independent board that gives Albertans an opportunity to appeal certain decisions made by Alberta Environment under the **Environmental Protection and Enhancement Act** the **Water Act** the **Climate Change and Emissions Management Act** and Schedule 5 of the **Government Organization Act**. These decisions may include approvals, water licences, preliminary certificates, reclamation certificates, remediation certificates, administrative penalties, enforcement orders, and environmental protection orders.

In addition to the agencies listed above, the following may have some jurisdiction in upstream oil and gas activity on provincial public land and private land:

- **Alberta Culture and Community Spirit**
 - protects historic or cultural sites under the *Historical Resources Act*
- **Alberta Health and Wellness**
 - sets health standards
- **Alberta Municipal Affairs**
 - **Special Areas** are municipal areas managed by the Special Areas Board, an arms-length board of Alberta Municipal Affairs
- **Alberta Employment and Immigration**
 - safe and fair workplaces
- **Alberta Tourism, Parks and Recreation**
 - manages provincial parks, wild land provincial parks, provincial recreation areas (**Provincial Parks Act**)
 - wilderness areas, ecological reserves, natural areas and heritage rangeland natural areas (**Wilderness Areas, Ecological Reserves Natural Areas and Heritage Rangelands Act**)
 - Willmore Wilderness Park (**Willmore Wilderness Park Act**)
- **Alberta Transportation**
 - provides and supports a safe, innovative, and sustainable provincial transportation system
 - controls access for roads connecting to provincial highways

Local Authorities (Municipalities and Counties, etc)

It is advisable for project proponents to connect with the local authority where they plan to conduct oil and gas activity. The local authority administers use of municipal roads, road maintenance, repairs, access control to municipal roads, building permits, etc. Depending on the project, various issues may arise such as the need for extensive use of community roads or accommodation for large numbers of employees which will impact housing availability or space in schools. Understanding the communities in which proponents plan to do business will help in identifying and addressing these types of issues, ideally leading to positive outcomes for communities and companies alike. As well, project proponents should be aware that property tax assessments and taxes are payable to the local authority.

Federal Regulatory Authorities

Federal government authorities regulate certain aspects of upstream oil and gas activity, depending on the location and nature of the proposed project. This guide is not intended to address federal regulatory requirements. Federal regulatory authorities include, but are not limited to:

- **Indian and Northern Affairs Canada**
- **Environment Canada**
- **Natural Resources Canada**
- **National Energy Board**
- **Indian Oil and Gas Canada**
- **Fisheries and Oceans Canada**
- **Canadian Environmental Assessment Agency**
- **Transport Canada**

2. Overview

This section provides high-level information about authorizations and consultation that are often required by the Government of Alberta during the lifecycle of an upstream oil or gas activity. [Section 4: Authorization Descriptions](#) provides greater detail regarding individual authorization and consultation requirements. Users should consult the relevant legislation and government agency materials for the most comprehensive picture of what may be required for each situation.

2.1. Getting Started

As part of the project planning process, the proponents should take time to understand Alberta's regulatory requirements as well as the community in which they intend to operate. Understanding community expectations will help proponents address potential issues early, creating a greater opportunity for good relationships and business success.

Proponents are encouraged to review all relevant requirements when planning projects so that they can identify choices that will impact the resulting timelines and complexity of the regulatory process; for example, most typical activities regulated by the ERCB are eligible for a routine, streamlined regulatory process, which generally results in a regulatory decision in a matter of days. When a project is more complicated and includes elements that present greater risk to the public or environment, regulatory triggers will be activated to increase regulatory oversight to ensure that the project is in the public interest. This greater regulatory oversight often results in a more involved process that takes additional time. For example, a project may have a choice of using saline or potable water. If the project uses saline water, it does not trigger Alberta Environment's **Water Act** licence process. If non-saline water is used, then the **Water Act** licence process is triggered.

Before a proponent begins the authorization process for the construction and operation of an upstream oil and gas activity, the following preliminary steps must be taken:

- [Obtaining Identification Codes](#)
- [Oil, Gas and Bitumen Exploration](#)
- [Acquire Mineral Rights](#)
- **Environmental Protection and Enhancement Act** Environmental Impact Assessment for specific projects
- [Acquire Land Access](#)
 - [Access to Private Land](#)
 - [Access to Provincial Public Land](#)
 - [Access to Federal Public Land](#)
- [Determine Government Plans, Policies and Guidelines for Places](#)

2.1.1. Obtaining Identification Codes

Prior to undertaking any oil and gas activity in Alberta, a company must first ensure that it is eligible to conduct business in Alberta. A company must be corporately registered under the **Business Corporations Act** or under another Act recognized in ERCB **Directive 067: Applying for Approval to Hold EUB Licences**

2.1.1.1. Process For Obtaining A Business Associate ID or Code

To conduct business with the ERCB and to report business through the Petroleum Registry, a company must obtain a Business Associate ID (BA ID) via the Petroleum Registry. This code is also used for royalty reporting purposes.

The process for obtaining a BA ID can be found here and then through 'Apply for Access.'

Section 21 of the **Oil and Gas Conservation Act** and Section 22 of the **Pipeline Act** refer to the BA ID as an Identification Code. The ERCB refers to the BA ID as a BA Code. **Directive 067: Applying for Approval to Hold EUB Licences** also details how a company obtains a BA ID or Code.

Once the BA ID is acquired, the party can then apply to the ERCB through the appropriate schedule in **Directive 067** for a Licence Eligibility Type. Alternatively, a party can submit the appropriate **Directive 067** schedule, and the ERCB will acquire the BA ID on behalf of the party.

If a company requires reporting on the Petroleum Registry, then a Business Associate User Security Administrator ID (BA USA ID) must be obtained. An authorization letter, signed by an officer of the company, must be received along with the submission before access will be granted. This process can be found on the **Petroleum Registry 'Login'** page stated above.

Once the BAUSA ID has been assigned, a single Business Associate User Security Administrator (BAUSA) is responsible for setting up users within their company and assigning and maintaining their access.

2.1.1.2. Process For Obtaining Electronic Transfer System (ETS) Client Accounts

To conduct tenure business with Alberta Energy (for example postings, bidding and transfers) a company must obtain an ETS account. The process for obtaining an ETS account and an overview of services can be found here or by contacting Clientregistry@gov.ab.ca. An authorization letter, signed by an officer of the company, appointing a site administrator must be received along with the submission before access will be granted to the ETS system. When the ETS account is created, a 7-digit ID will be created for the company that is utilized by the internal systems in Alberta Energy. A 7-digit ID will be created internally for any business conducted outside the ETS process.

2.1.1.3. Process for Obtaining a 7-Digit ID For Conducting Business with Sustainable Resource Development

Sustainable Resource Development uses the same 7-digit ID code provided to the business by Alberta Energy.

2.1.2. Oil, Gas and Bitumen Exploration

According to the ***Mines and Minerals Act*** with respect to petroleum and natural gas, exploration is any operation on or over land or water to determine geologic conditions underlying the surface of land or water. Approval under the ***Exploration Regulation (284/2006)*** is required. Exploration typically occurs through geophysical (seismic) activities. Activities on public and private lands with respect to seismic exploration programs require authorizations administered by Sustainable Resource Development under the ***Exploration Regulation*** and associated exploration directives of the ***Mines and Minerals Act***. On public land, including lands under Alberta Tourism, Parks and Recreation jurisdiction, water bodies, or the bed and shore of a water body, seismic operators must submit a ***Geophysical Field Report*** (GFR) to obtain an authorization from Sustainable Resource Development.

Exploration activity related to oil sand resource exploration for proposed in situ development is directed by the ***Code of Practice for Exploration Operations*** pursuant to the ***Environmental Protection and Enhancement Act***. For bitumen exploration, the Code of Practice outlines the requirements of an Activities Plan that a company must complete to carry-out the exploration activity. Notice under the ***Environmental Protection and Enhancement Act Code of Practice for Exploration Operations*** must be filed prior to exploration operations associated with in situ bitumen recovery operations. The Notification and surface access approval required on public land under the ***Public Lands Act*** is administered by Sustainable Resource Development.

Once oil and gas exploration is completed, the program licensee is required to file a ***final plan*** (within 90 days following the date of approved program completion to Sustainable Resource Development.)

2.1.3. Acquire Mineral Rights

Mineral rights, specifically petroleum and natural gas rights or bitumen rights, must be acquired from the owner of the resource. In Alberta, the provincial government (also known as the Crown) owns 81 per cent of the province's mineral rights. The remaining 19 per cent are "freehold" mineral rights owned either by individuals and companies or by the Government of Canada on behalf of First Nations or national parks.

Alberta Energy issues mineral rights owned by the province of Alberta. These rights are acquired through a competitive bid auction held every two weeks with the highest bidder winning the parcel or through transactions between companies. Prior to formulating a bid, applicants should ensure they perform their due diligence by researching surface access conditions to ensure they have an accurate understanding of the operational challenges of a given site (see ***Information Letter 2007-21: Crown Mineral Rights; Identification of Major Surface Concerns in Public Offering Notices***). Details regarding

this process can be found on [Alberta Energy's website](#) under the "Information Letter" heading of "Related Links".

Where mineral rights are held privately, the applicant must come to an agreement with the mineral rights holder. Alberta Energy administers collection of a freehold mineral tax on production of bitumen, petroleum and natural gas not owned by the province. The tax ensures mineral owners contribute to Alberta's infrastructure and regulatory costs.

Information regarding Crown mineral dispositions and activities are contained within Alberta Energy's **Land Status Automated System**. The department also makes maps (interactive and PDF) showing the current disposition of mineral rights in Alberta for different commodities available on their website at the following links:

- **Interactive maps**
- **PDF maps**

Prior to offering mineral rights, the Government of Alberta may perform a general assessment to identify major surface or environmental concerns. This may result in the attachment of an addendum to the **Public Offering Notice** which reflects a surface or environmental concern that may affect surface access.

2.1.4. Environmental Protection and Enhancement Act Environmental Impact Assessment

The **Environmental Assessment (Mandatory and Exempted Activities) Regulation** identifies activities requiring environmental impact assessments. Environmental Impacts Assessments consider the environmental, social, economic and health impacts of a proposed project. Alberta Environment directs and manages Alberta's Environmental Assessment process and may involve other provincial or federal agencies as required.

Alberta's Environmental Assessment Process has three basic goals.

- To gather information – the process ensures that enough information is provided by the project proponent to inform the public, government agencies and decision-makers about the proponent's understanding of the consequences of their project.
- Public involvement – the process provides an opportunity for people who may be affected by a proposed activity to express any concerns and provide advice to proponents and government agencies.
- Support sustainable development – the information provided during the process allows early consideration of the project's place in the overall plan for the province's environment and economy.

2.1.5. Acquire Land Access

The process to acquire the right to use the surface land or "surface access rights" for facilities, wells, pipelines, access roads or other structure required to develop bitumen, petroleum and natural gas resources differs depending upon whether the land is owned privately or by the Crown.

Approximately 60 per cent of the surface land in the province is Crown-owned (or public land) and 40 per cent is privately owned. Determining the status of the land for a proposed activity is a critical step to acquiring surface access rights. In addition, many of the authorization and consultation requirements differ on public and private land. To determine whether an interest in the land base has been registered:

- Conduct a land title search through a **registry office** to identify whether land is public or private.
- On public land, conduct a search using the Land Status Automated System to determine if the parcel is occupied or vacant. For more information about the Land Status Automated System, contact the Calgary Information System at 403-297-6324, email infocentre.energy@gov.ab.ca, or visit **Our Business** on Alberta Energy's website.

Permission to use land for a proposed activity is required regardless of whether activity is planned on public or private lands.

2.1.5.1. Access to Private Land

To acquire the rights to use privately owned land for oil and gas activity, a company and a landowner must enter into a surface lease agreement or a right-of-way agreement for pipelines. The agreement outlines how a company proposes to use the land for facilities and access roads, details the compensation the landowner is entitled to in exchange for the use of their land, and identifies land use duration.

When a company and an affected party such as a landowner are unable to resolve their issues, the ERCB offers an Appropriate Dispute Resolution Program, or ADR. ADR includes a variety of options to manage disputes, such as direct negotiation between the affected parties, ERCB staff facilitation, third-party mediation and an ERCB public hearing.

The ADR process aims to

- improve landowner/industry (stakeholder) relations;
- improve industry/industry relations;
- increase face-to-face discussions between affected stakeholders, leading to local solutions for local problems;
- ensure better use of the ERCB's and stakeholders' time and resources; and
- achieve a higher percentage of resolved disputes without an ERCB public hearing. Should an ERCB public hearing become necessary, the use of ADR options can help by reducing the number of issues that need to be decided at the hearing.

If a company and a landowner are unable to negotiate an agreement, the applicant may choose to submit a non-routine facility application to the ERCB. If the ERCB deems that the landowner may be directly and adversely affected by the proposed activity, then the application may go to hearing. Matters of compensation are not within the ERCB's jurisdiction; therefore, if landholder consent is not provided solely due to compensation issues, then the ERCB is not in a position to consider the

landholder's objection. In this situation, the ERCB will process the application and, if it is approved, then the licence will allow the applicant to apply to the **Surface Rights Board** for a right-of-entry order and to determine compensation (see [Table 12](#) and [Figure 5](#) for more information).

2.1.5.2. Access to Provincial Public Land

Sustainable Resource Development administers provincial public lands as described in the ***Public Lands Act***. Other Alberta departments with authority over specific portions of the provincial public land include:

- **Alberta Environment**
 - manages access to some lands that are utilized for water management
- **Alberta Tourism, Parks, and Recreation**
 - manages provincial parks, wild land provincial parks, provincial recreation areas (***Provincial Parks Act***)
 - wilderness areas, ecological reserves, natural areas and heritage rangeland natural areas (***Wilderness Areas, Ecological Reserves Natural Areas and Heritage Rangelands Act***)
 - Willmore Wilderness Park (***Willmore Wilderness Park Act***)
- **Alberta Municipal Affairs**
 - **Special Areas** are municipal areas managed by the Special Areas Board, an arms-length board of Alberta Municipal Affairs
- **Alberta Transportation**
 - provides and supports a safe, innovative, and sustainable provincial transportation system
 - controls access to provincial highways
 - owns surveyed road allowances outside of municipalities where ownership was conveyed.
 - Municipalities have day to day management of surveyed road allowances.
- **Alberta Culture and Community Spirit:**
 - responsible for protecting historic or cultural sites under the ***Historical Resources Act***

Surface access to occupied public land requires consent from the occupant. Occupants are land users such as forest management agreement holders or grazing lease holders, who occupy public land based on the terms of their agreements.

Before submitting an application to Sustainable Resource Development, the applicant must negotiate with the occupant to obtain consent. A copy of the consent agreement must be submitted to Sustainable Resource Development with the application for surface access before a disposition will be issued.

Proponents must have a Pipeline Agreement (PLA) application number or a Mineral Surface Lease (MSL) from Sustainable Resource Development before applying to the ERCB for oil and gas activity on public lands.

For use of non-occupied public land (i.e., public lands not under disposition), an approval from Sustainable Resource Development is required.

Public land access may require consultation with First Nations communities. This can be a key component of an authorization for public lands. See [Section 2.3.2 Consultation/Notification](#) for additional information.

2.1.5.3. Access to Federal Public Land

Examples of federal public land in Alberta include national parks, Indian reserves and military bases. Conducting upstream oil and gas activities on federal lands is subject to the federal regulatory regime and is beyond the scope of this guide. For further information in this regard, refer to the [Government of Canada](#) website.

2.1.6. Understanding Government Plans, Policies and Guidelines for Land Use

The Government of Alberta has a number of land-use management policies and guidelines. These policies and guidelines may result in different and/or additional authorization requirements for certain regions within Alberta. Prior to seeking out any specific approvals for an activity, it is recommended that proponents identify which, if any, regional and/or local guidelines and requirements apply to their proposed project. Examples of these policies and guidelines include:

- **Land Use Framework**
Regional plans under the Land-use Framework provide a blueprint for how we will use and conserve land for future generations.
- **The Integrated Land Management (ILM) Program**
The ILM Program provides direction for all land use activity on public land, including upstream oil and gas activity, and focuses on the integration of these activities on the landscape to minimize footprint.
- **Integrated Resource Plans (IRPs) and other place-based plans**
Planning documents have been developed by the Government of Alberta (GOA) to provide land and resource management intent in specific areas of the province. [Integrated Resource Plans](#) were developed during the 1970's to early 2000's in various areas of Alberta to inform land use management. They provide guidelines and information about resource strategies and objectives, compatible and non-compatible uses, and mitigation options. Often the plan area will be delineated into sub-areas such as zones or resource management areas (RMAs) or in some cases both.

Some of these plans have [Forest Land Use Zones \(FLUZ\)](#). A FLUZ is an area of public land to which legislative controls apply to assist in the management of industrial, commercial and recreational land uses and resources. There are 19 FLUZs covering approximately 11,200 square kilometres of public land in Alberta.

There are three approved access management plans in Alberta. These plans support ILM: [Chungo Creek Industrial Access Management Area](#); [Kakwa Copton Industrial Corridor Plan](#); and the [Berland Smoky Access Plan](#).

- Other Plans such as Water Management Plans developed under **Water Act** and Airshed Management Plans that may be developed under **Environmental Protection and Enhancement Act** will set out constraints for activities given the unique characteristics of areas of Alberta.

2.2. Obtaining Authorizations for Construction, Operation or Activity Closure

Authorizations for construction, operation or activity closure of upstream oil and gas activities are required from Alberta Environment, the ERCB, and Sustainable Resource Development as well as other agencies. Some authorizations issued prior to construction or operation of an activity will set activity closure requirements. Closure authorizations required at the end of the life-cycle of activities are described in Section 2.3.

The following provides an overview of authorization requirements. Details on these requirements are in Section 4

2.2.1. Alberta Environment

- **Environmental Protection and Enhancement Act** Environmental Impact Assessment: The **Environmental Assessment (Mandatory and Exempted Activities) Regulation** identifies activities requiring environmental impact assessments. These assessments consider the environmental, social, economic and health impacts of a proposed project. Alberta Environment directs and manages Alberta's Environmental Assessment process and may involve other Provincial or Federal agencies as required.
- **Environmental Protection and Enhancement Act** Approvals: Approvals are required for activities that are identified in Schedule 1 of the **Activities Designation Regulation**.
- **Environmental Protection and Enhancement Act** Registration: Registrations are required for activities that are identified in Schedule 2 of the **Activities Designation Regulation**. These activities must meet the requirements outlined in the **Environmental Protection and Enhancement Act** as well as its associated regulations and codes of practice.
- **Environmental Protection and Enhancement Act** Notice: Notices are required for activities that are identified in Schedule 3 of the **Activities Designation Regulation**. These activities must meet the requirements of the **Environmental Protection and Enhancement Act** and its associated regulations and codes of practice.
- **Water Act** Licence: Ownership of all water in Alberta is vested in the Crown, and therefore in most cases licences under Alberta's **Water Act** are required prior to using or diverting water including surface or groundwater. Under the **Water (Ministerial) Regulation**, a diversion of saline groundwater does not require a licence.
- **Water Act** Approval: Approvals under Alberta's **Water Act** are required for any activity that may or does affect the management of the province's water resources including those that disturb or may disturb surface or groundwater, i.e., construction in, on, under, over or adjacent to a water body or groundwater.

- **Water Act Notice** (for Codes of Practice): Notice under the **Water Act** is required for a number of activities that do not require a **Water Act** approval or licence but are subject to codes of practice. Codes of practice detail how each activity must be undertaken to ensure it minimizes its impact on water management. Examples of these activities include: pipelines and telecommunication lines crossing a water body, outfall structures, watercourse crossings and diversions of water for hydrostatic testing of pipelines. Codes of practice also set out timelines and requirements for a proponent to provide notice to Alberta Environment of its intent to conduct an activity or water diversion in accordance with the code of practice.
- **Climate Change and Emissions Management Act and its Regulations (Specified Gas Emitters Regulation, and Specified Gas Reporting Regulation)**: When facilities break the 100,000 tonne greenhouse gas emissions threshold, proponents are obligated to contact Alberta Environment and establish an emissions baseline for the facility. This baseline is what the facility must report against in future compliance years. Also, when the facilities make a physical change to their facility or a change to the way it operates that may affect their emissions performance, they are required to notify Alberta Environment of the change and then arrange a meeting to discuss how the change may impact the facilities emissions baseline or future compliance reporting. Alberta Environment must approve any changes to the baseline or reporting methodologies before they can be used by the facility.

2.2.2. ERCB

When an application is received, the ERCB reviews it and then can (1) close the application for deficiencies; (2) deny the application outright; (3) approve the application on its own initiative, without holding a hearing if there are no objections or if the objecting party is not a person whose rights will be directly and adversely affected by its decision; (4) if it appears that there are persons whose rights will be directly and adversely affected by its decision, or if it is necessary to carry out any purpose under the **Energy Resources Conservation Act** set the application down for a Board or Examiner hearing. ERCB hearings follow a quasi-judicial process and are held before either a Board or Examiner panel.

When the ERCB approves an application, it may attach conditions to the approval which set out additional requirements that must be met in order for the activity to be in the public interest. These conditions may reflect the concerns of objecting parties or address technical concerns identified by the ERCB.

The ERCB can review, rescind, or vary its decision, and can re-hear an application prior to deciding it. Parties can also apply to the Alberta Court of Appeal for leave to appeal ERCB decisions.

- **In situ Recovery Scheme Approvals**: The in situ scheme application process provides for information submissions, technical review, stakeholder notification and consultation, and adjudication (including a hearing if necessary). Once the in situ oil sands scheme has received approval, individual ERCB licences for related facilities, wells and pipelines associated with in situ oil sands projects must be applied for and approved before any preparatory or incidental field operations can commence.

- Energy Development Licence: Any petroleum industry development that includes constructing and operating a well, pipeline or facility requires a licence issued by the ERCB.
- Resource or Pool Development Application: The Resource or Pool Development Application is used to obtain authorization for commingling, well spacing, enhanced recovery and disposal schemes, changes to oil well production rate administration, equity matters such as rateable take and compulsory pooling, pool delineation and gas removal. These are administered by the ERCB.
- Emergency Response Authorization: In cases where a well, pipeline or facility contains a hazardous product such as sour gas, an activity specific emergency response plan may be required.
- Flare Permits: Depending upon the amount of gas that is flared or vented, a flaring permit may be required to conduct these activities.
- Injection and Disposal Wells: Injection for the purposes of enhanced recovery or disposal must be applied for and approved by the ERCB prior to the commencement of injection operations.
- Drilling Waste Management: For most drilling waste disposal methods, notification to the ERCB is sufficient. However, in some cases where hydrocarbon-based drilling wastes are being treated or advanced gel chemical-based drilling wastes are being disposed, authorizations may be required. These are administered through the ERCB.
- Oilfield Waste Management Facility Authorization: Authorization is required to construct or operate an oilfield waste management facility. The ERCB and AENV divide regulatory responsibilities based on the type of waste management facility or activity. For more information, refer to the **Memorandum of Understanding Between the Alberta Energy and Utilities Board and Alberta Environment on Harmonization of Waste Management (ID-2000-3)**.

2.2.3. Sustainable Resource Development

- Public Lands Act Dispositions: Activities on public land are authorized and allocated by Sustainable Resource Development under dispositions. A disposition is defined as every instrument executed under the **Public Lands Act** that gives the disposition holder authority to use public land for specific purposes and activities. Approval for a disposition (or activity) on public land is given in the form of lease documents or letters of authority. Dispositions include a set of administrative and operating conditions to ensure acceptable use of land. Public land may also be disposed through sale, lease, license, permit, agreement, transfer or exchange.

Section 2.1.5.2 describes the types of approvals associated with certain oil and gas activities on public land as managed by Sustainable Resource Development. Additional non-oil and gas disposition types are detailed in the **Public Land Operational Handbook**, and in Appendix 6 of **Alberta Provincial Decision Processes Related to Integrated Land Management** document.

2.2.4. Other Agencies

- **Alberta Culture and Community Spirit's Historic Resources Management Branch:** Prior to development on lands that contains or may contain historic resources, a proponent may need to apply for ***Historical Resources Act*** clearance from Alberta Culture and Community Spirit's Historic Resources Management Branch. The *Historical Resources Act* applies on both public and private lands.

2.3. End of Life-Cycle (Activity Closure) Requirements

At the end of the productive life of most upstream oil and gas activities, abandonment requirements must be met and regulatory agency certifications are required to ensure the activity and the site it was on have been appropriately abandoned, decommissioned, remediated and/or reclaimed.

- **Abandonment Requirements:** ERCB **Directive 013** sets out suspension requirements for wells; ERCB **Directive 020** sets out well abandonment requirements; ERCB **IL 98-02** sets out requirements for suspension, abandonment, decontamination and surface land reclamation. As well, ERCB **Directives 008, Directive 009, Directive 010, Directive 027, Directive 043, and Directive 051** deal with aspects of well integrity that are important for future abandonment. If abandonment will not meet requirements, a non-routine abandonment request must be filed with the ERCB as explained in ERCB **Directive 20**. Schedule 3 of ERCB **Directive 56** must be used to notify the ERCB of a pipeline abandonment and pipeline discontinuation.
- **Reclamation Certification:** An ***Environmental Protection and Enhancement Act*** Reclamation Certificate is required for upstream oil and gas sites activities on "specified lands" as set out in the **Conservation and Reclamation Regulation**. Reclamation certificates are administered by Alberta Environment for private land in Alberta, and Sustainable Resource Development for Alberta's public land.
- **Remediation Certification:** An ***Environmental Protection and Enhancement Act*** Remediation Certificate can be obtained certifying contamination has been addressed on sites (including upstream oil and gas sites) such that the standards have been met. Remediation certificates are administered by Alberta Environment.

2.4. Consultation / Notification

Proponents may be required to consult and/or notify stakeholders about their upstream oil and gas project and/or activities that are part of the project. Consultation/notification requirements depend on the nature, size and scope of the activity, and the authorizations needed. Consultation/notification ranges from publishing a public notice in a newspaper prior to filing an application to meeting directly with identified affected parties to discuss the project to participating in a community open house.

Requirements for consultation/notification are set out in legislation, policy and directives, and are sometimes tied to direction the courts have provided. Proponents must ensure they are familiar with the consultation that may be required for their specific project.

2.4.1. Consultation Programs

Applicants may have public consultation programs that can be tailored to fit the unique circumstances of a proposed project. If a company does not have such a program, or is in the process of developing one, the following factors should be considered:

- As upstream oil and gas activities often involve multiple authorizations issued by different agencies, the consulted parties and requirements may vary. To ensure a project-specific consultation program addresses all requirements in one consultation program, proponents are advised to fully review the appropriate assessment and authorization guidance documents and contact the relevant government authorities directly to answer any outstanding questions prior to commencing any consultation activities. One consultation program is advantageous to all parties, including landowners.
- First Nation consultation processes are separate from general stakeholder consultation processes and are described in [Section 2.4.2](#).

2.4.2. The Government of Alberta's First Nations Consultation Policy and Guidelines on Land Management and Resource Development

The Government of Alberta's **First Nations Consultation Guidelines on Land Management and Resource Development** describes Alberta's policy to consult with First Nations where land management and resource development have the potential to adversely impact First Nations' rights and traditional uses." The guidelines require project proponents to consult with First Nations in accordance with the policy. Generally, First Nations consultation will include the following:

- The proponent should contact Alberta early in the process to determine if the duty to consult is triggered, if Alberta is delegating the procedural aspects of consultation to the proponent, and if so, with which First Nation(s).
- Provide early notification to either the band council or a designate of potentially adversely impacted First Nation(s).
- Provide plain language information describing the scope and location of the project, and clearly identifying those potential adverse impacts which the proponent anticipates in the short and long term.
- Provide the prescribed time for First Nation(s) to review, consider and respond to the information furnished, and follow up with the First Nation(s) during this period.
- If required, meet to discuss comments and concerns of the potentially adversely impacted First Nation(s).
- Strategize to avoid or mitigate the potential adverse impacts the project could have on the exercise of rights and traditional uses.
- Where agreement has not been reached about how to avoid or mitigate potentially adverse impacts, provide written reasons to the Government of Alberta.
- Before issuance of government approvals, the proponent must provide the Government of Alberta with a summary of its efforts, with the same summary copied to the affected First Nation(s).

2.4.3. Potential Parties with whom Consultation may be Required for Upstream Oil and Gas Authorizations

Table 1 identifies which authorization processes have consultation requirements and provides a high-level overview of potential parties with whom consultation may be required. More detailed consultation requirements are provided in the tables in Section 4: Authorization Descriptions. The timelines and details of consultation/notification vary and should be investigated in detail. Some consultation/notification processes will take a few days, while others may take weeks to plan and implement.

For the purpose of this table:

- Consultation should be interpreted in its broadest sense and can include all forms of stakeholder or First Nations consultation including notification and personal consultation.
- The heading “Licence and Permit Holders” includes all short- and long-term land users and rights holders who may be tenants, lessees, surface agreement holders, forest management agreement holders or trappers.
- The heading “Occupant” is defined under the ERCB’s **Directive 56** as “A person other than the owner who is in actual possession of land; a person who is shown on a certificate of title or by contracts as having an interest in the land; in the case of Métis land, a person having a right or interest in land recorded on the Métis title register pursuant to the Métis Settlements Land Registry Regulation; the holder of a permit for a coal mine; and the owner of a private access road.”
- The heading “Oil or Gas Sub-surface Interests or Facilities Licensees” includes other mineral rights owners and lessees. Licensees of facilities that may be affected include ERCB licensed wells, pipelines, and production/processing facilities.

Consultation is not required for business associate codes, petroleum and natural gas licences and leases, **Water Act** notices, **Environmental Protection and Enhancement Act** registrations and notices.

Table 1: Potential Parties with whom Consultation may be Required for Upstream Oil and Gas Authorizations

AUTHORIZATION PROCESS	Oil or Gas Sub-surface interests or facilities licensees	PUBLIC LANDS (as described in the Public Lands Act)				PRIVATELY OWNED LAND			
		Landowner	Licence / Permit Holder	First Nations	General Public	Landowner	Occupant	First Nations	General Public
<i>Public Lands Act Disposition</i>		✓	✓	✓					
<i>Right of Entry (Surface Rights Board)</i>		✓	✓			✓	✓		
<i>Water Act Approval</i>		✓	✓	✓	✓	✓	✓	✓	✓
<i>Water Act Licence</i>		✓	✓	✓	✓	✓	✓	✓	✓
<i>Environmental Protection and Enhancement Act Approval</i>		✓	✓	✓	✓	✓	✓	✓	✓
<i>Environmental Protection and Enhancement Act Environmental Assessment</i>		✓	✓	✓	✓	✓	✓	✓	✓
ERCB In situ Recovery Scheme Application ¹	✓	✓	✓	✓	✓	✓	✓	✓	✓
ERCB Energy Development Licences ²	✓	✓	✓	✓ ³	✓	✓	✓	✓ ³	✓
ERCB Resource or Pool Development Applications ⁴	✓		✓						
ERCB Flare Permit Application ⁵		✓				✓	✓	✓ ⁶	✓
ERCB Drilling Waste Management Application		✓	✓	✓		✓	✓	✓	
ERCB Oilfield Waste Management Application	✓	✓	✓	✓ ³	✓	✓	✓	✓ ³	✓
ERCB Emergency Response Plan ⁷		✓	✓	✓	✓	✓	✓	✓	✓
<i>Historical Resources Act Clearance</i> ⁸				✓				✓	

¹ For full notification and consultation requirements, refer to *Directive 023* and *Directive 056*, Part 2 for facilities associated with the scheme.

² For full notification and consultation requirements, refer to *Directive 056*, Part 2.

³ Proponent must meet the requirements described in *Alberta's First Nations Consultation Guidelines*.

⁴ These include well spacing, enhanced recovery schemes, gas cycling schemes, gas storage, concurrent production, acid gas disposal, rateable take, commingled production, good production practices and gas-oil ratio relief, and compulsory pooling applications addressed by ERCB ***Directive 065: Resources Applications for Conventional Oil and Gas Reservoirs***.

⁵ For full notification and consultation requirements, refer to *Directive 060*, Part 2.

⁶ First Nations may need to be consulted if they are also an occupant, resident or landowner who is potentially directly and adversely affected.

⁷ For full notification and consultation requirements for emergency response plans, including local authorities consultation, refer to ***Directive 071: Emergency Preparedness and Response Requirements for the Petroleum Industry***.

⁸ First Nations consultation requirements for historic resources on private land is assessed on a case by case basis and are rarely issued.

3. Common Upstream Oil and Gas Activities

The Government of Alberta regulates many, and in some cases all, aspects of a number of activities throughout the construction, operation, maintenance, abandonment, remediation and reclamation stages of the activities' lifecycle. This section provides an overview of key authorizations applicants need for the following seven common regulated upstream oil and gas activities:

1. Exploration: means any operation on or over land or water to determine geologic conditions underlying the surface of land or water.
2. In situ Recovery Scheme/Facilities: Facilities, wells and pipelines associated with the in situ extraction of bitumen. This guide does not cover the regulation of upgraders and heavy oil processing plants.
3. Wells and Production Facilities: Includes structures used for the extraction, storage and processing of petroleum-related substances (e.g., gas, oil, bitumen, heavy oil, HPV, LVP, salt water), including sweet wells, sour wells, compressor stations, batteries, and satellites. Sour wells, pipelines and facilities process oil and gas containing hydrogen sulphide (H₂S) and other sulphur compounds. Please refer to specific regulatory instruments for amount of H₂S that must be present to be classified as 'sour.'
4. Pipelines: A piping system used to transport petroleum-related substances including gas, oil, bitumen, heavy oil, as well as produced water and oilfield waste. This guide focuses on pipeline gathering systems and does not include major transmission pipelines.
5. Sour Gas Plants: Plant that processes raw sour gas and separates and removes sulphur compounds from the raw gas stream.
6. Oilfield Waste Management Facilities: Facilities that manage, treat and dispose of oilfield waste.
7. Roads and other linear disturbance: Roads, trails, water body crossings and other linear disturbances that provide permanent, temporary, and seasonal access to upstream oil and gas activities and facilities.

These seven activities may also be required to meet additional requirements throughout their lifecycle. For complete details on authorizations, read the relevant requirements (e.g., policies, legislation, regulations, codes of practice, directives) on the responsible agencies' web sites. Users of the following tables should consult with the governing legislation and/or agencies for further details.

Details on key authorizations and consultation requirements for these activities are in [Section 4: Authorization Descriptions](#) .

3.1. Exploration⁹

Oil and gas exploration means any operation on or over land or water to determine geologic conditions underlying the surface of land or water. Exploration is typically geophysical (seismic) activity.

Table 2: Exploration Authorizations

Authorization	DESCRIPTION
Sustainable Resource Development	
<u>Public Lands Act Dispositions</u>	<p>Geophysical Exploration (GEO) Approval: A GEO is an approval issued for the purpose of exploring for oil and gas subsurface deposits. This activity must be approved under the <u>Mines and Mineral Act</u> Part 8 <u>Exploration Regulation</u>. If oil and gas deposits are found, the proponent applies for the appropriate surface disposition to develop the resource.</p> <p>Licence of Occupation (LOC): Grants the right to occupy public lands for an approved purpose, and may be subject to other dispositions granted for the same area. They are issued primarily for access roads, but may also be issued for other purposes (e.g., exploration activities). The LOC does not grant any other right to the land. The term of the licence varies depending on the purpose.</p>
Alberta Environment	
<u>Environmental Protection and Enhancement Act Notice</u>	Notice under the <u>Environmental Protection and Enhancement Act Code of Practice for Exploration Operations</u> must be filed prior to exploration operations associated with in situ bitumen recovery operations. This is administered by Sustainable Resource Development on <u>public lands</u> , and by Alberta Environment on private / patented lands.
<u>Water Act Approval</u>	Examples of exploration activities that may require approvals under Alberta's <u>Water Act</u> include disturbances such as drilling seismic shot holes in water bodies including their floodplains. Depending on the nature of the watercourse crossings required, they may be exempt from <u>Water Act</u> approvals under specific conditions set out in the <u>Water (Ministerial) Regulation</u> , or they must be conducted according to a <u>Water Act</u> code of practice including providing adequate written notice.
<u>Water Act Licence</u>	Examples of exploration water diversions that may require licences under Alberta's <u>Water Act</u> include water diversions for dust control. In the Green Area of Alberta many small temporary water diversions are exempt from <u>Water Act</u> licences under specific conditions set out in the <u>Water (Ministerial) Regulation</u> .

3.2. In situ Recovery Schemes/Facilities

The construction of production facilities, wells, pipelines, storage and material handling facilities, roadways and other installations associated with the in situ extraction of oil sands will require the following authorizations. Note that the scope of this guide covers only upstream activities; therefore, upgraders and processing plants are not included in this table.

⁹ Exploration does not include exploratory drilling

Table 3: In situ Recovery Scheme/Facility Authorizations

AUTHORIZATION	DESCRIPTION
SUSTAINABLE RESOURCE DEVELOPMENT	
<p><u>Public Lands Act Dispositions</u></p>	<p>Pipeline Agreement (PLA): Authorizes construction of a pipeline or flowline within the right-of-way, and construction of right-of-way installations incidental to the pipeline (e.g., valve, valve box, connection, foundation). The agreement may remain in effect for as long as required.</p> <p>Pipeline Installation Lease (PIL): Grants exclusive surface rights for surface right-of-way installations (generally off the right-of-way) that are incidental to pipeline operation (e.g., pumping station, compressor site, metering facility). The maximum term is 25 years and is renewable.</p> <p>Mineral Surface Lease (MSL): Issued to mineral producers and grants exclusive surface rights for surface mining and quarries, wellsites for oil and gas extraction, heavy oil/in situ oil sands and battery sites, or for other purposes incidental to the recovery and production of minerals. The maximum term is 25 years and is renewable.</p> <p>Miscellaneous Lease (MLL): May be issued for a variety of purposes that are not specifically covered by regulations under the <u>Public Lands Act</u> (e.g., commercial site, refinery, processing plant, mill, and plant site). These leases are normally issued for 10 years, with the maximum term being 25 years, which is renewable.</p> <p>Miscellaneous Permit (MLP): Issued for a variety of purposes that are not specifically covered by regulations under the <u>Public Lands Act</u> (e.g., industrial campsites) but are for short-term use (1 year maximum). If the land continues to be used for the purpose stated in the permit after three years, the permit may be converted to a miscellaneous lease based on recommendation of the appropriate area land manager.</p> <p>Temporary Field Authority (TFA): Authorized as any other disposition granted by the Crown. It provides for the issuance of a short-term (1 year or less) disposition under the <u>Public Lands Act</u> and <u>Mines and Minerals Act</u>. Authorizations may be issued for range improvement, borrow pits, remote sumps or other temporary activity. The <u>TFA Manual</u> provides more details.</p> <p>Licence of Occupation (LOC): Grants the right to occupy public lands for an approved purpose, and may be subject to other dispositions granted for the same area. They are issued primarily for access roads, but may also be issued for other purposes (e.g., water intake/outfall sites, pier sites, airstrips, reservoirs). The LOC does not grant any other right to the land. The term of the licence varies depending on the purpose.</p>
ALBERTA ENERGY	
<p>Oil Sands Lease Agreement</p>	<p>Based on the <u>Oil Sands Tenure Regulation</u>, the department issues an oil sands lease agreement to the highest bidder to drill for, win, work, recover</p>

AUTHORIZATION	DESCRIPTION
	and remove oil sands for a 15 year term. Upon expiry, the lessee may continue the oil sands lease if they meet the minimum level of evaluation required for each section.
Oil Sands Permit Agreement	Based on the <u>Oil Sands Tenure Regulation</u> , the department issues an oil sands permit agreement to the highest bidder to drill for, win, work, recover and remove oil sands for a 5 year term. Upon expiry, the lessee may apply for lease selection if they meet the minimum level of evaluation required for each section. Permits are considered exploratory and upon expiry, the lessee may apply for lease selection on all or part of the oil sands permit. (If the lease selection is granted, then one or more 15 year term oil sands lease(s) are issued).
ERCB	
<u>In situ Scheme Approval</u>	<u>Directive 023: Guidelines Respecting an Application for a Commercial Crude Bitumen Recovery and Upgrading Project.</u> Sets out the ERCB application requirements for in situ oil sands recovery schemes.
<u>Energy Development Licence</u>	<u>Directive 56: Energy Development Applications and Schedules.</u> Once the in situ scheme is approved, operators must apply for individual wells, facilities, and pipeline licences as set out in Directive 056.
<u>Drilling Waste Management Authorization</u>	<u>Directive 050: Drilling Waste Management.</u> Details requirements for land disposal of drilling waste. Some of the disposal methods require upfront approval. Drilling waste not being managed by a land disposal method set out in Directive 050 must be managed in accordance with <u>Directive 058: Oilfield Waste Management Requirements for the Upstream Petroleum Industry.</u> Depending on the anticipated method of waste disposal, there may be differing information requirements at various times during the drilling/disposal process.
<u>Injection and Disposal Wells</u>	<u>Directive 051: Injection and Disposal Wells - Well Classifications Completion, Logging and Testing Requirements</u> sets out the wellbore and fluid/waste quality requirements for injection and disposal wells. <u>Directive 065: Resources Applications for Conventional Oil and Gas Reservoirs</u> sets out the ERCB application requirements for the storage or disposal of any fluid or substance to an underground formation through a well.
ALBERTA ENVIRONMENT	
<u>Water Act Notices</u>	Written notice under the <u>Water (Ministerial) Regulation</u> is a streamlined process for activities and water diversions that are exempt from an approval or licence provided they follow an approved Code of Practice. The Codes of Practice relevant to in situ activities include: <u>Pipelines and Telecommunication Lines Crossing a Water Body; Outfall Structures on Water Bodies;</u> and <u>Temporary Diversion of Water for Hydrostatic Testing of Pipelines .</u> Other in situ operations diversions of non saline water are not exempt from a licence.
<u>Water Act Licence</u>	Typical diversions include surface and non saline ground water diversions for steam injection associated with in situ bitumen, and temporary water diversions for hydrostatic testing, drilling fluid and controlling dust. Temporary diversions of water for hydrostatic testing of pipelines are exempt

AUTHORIZATION	DESCRIPTION
	from requiring a licence provided the diversion follows the appropriate code of practice requirements.
<u>Water Act Approval</u>	<u>Water Act</u> approvals are required for any activity that may or does affect water management (surface and ground water), subject to exemptions in the <u>Water (Ministerial) Regulation</u> . Typical activities requiring an approval include construction of works in water bodies such as wetlands, causeway construction, erosion control installations and activity in flood plains.
<u>Environmental Protection and Enhancement Act</u> <u>Environmental Impact Assessment</u>	An environmental impact assessment is mandatory for the construction, operation and reclamation of a commercial oil sands, heavy oil extraction, upgrading or processing plant producing more than 2000 m ³ of crude bitumen or its derivatives per day. Projects lower than the 2000 m ³ /day bitumen production fall under the discretionary category (where the Director will decide if an environmental impact assessment is warranted.)
<u>Environmental Protection and Enhancement Act</u> <u>Approval</u>	<u>Environmental Protection and Enhancement Act</u> approval is required for: hydrostatic testing of vessels, impoundments, or pipes that generate greater than 1000 cubic metres of water (this does not include petroleum liquid pipelines or gas pipelines); conservation and reclamation of oil production sites; and for an “enhanced recovery in situ oil sands or heavy oil processing plant” that processes or recovers heavy oil or crude bitumen by thermal or solvent in situ recovery methods, but does not include any production facilities that are connected by pipeline to the plant.(Note: If an Environmental Impact Assessment was required for the enhanced recovery in situ oil sands or heavy oil processing plant, than the production facilities would typically be included under an <u>Environmental Protection and Enhancement Act</u> approval.)
<u>Environmental Protection and Enhancement Act</u> <u>Registration</u>	Registration under the <u>Environmental Protection and Enhancement Act Code of Practice for the Release of Hydrostatic Test Water from Hydrostatic Testing of Petroleum Liquid and Gas Pipelines</u> is required for the release of water from hydrostatic testing of pipelines as detailed in the Code of Practice.
<u>Environmental Protection and Enhancement Act</u> <u>Notice</u>	Notice under the <u>Environmental Protection and Enhancement Act Code of Practice for Exploration Operations</u> must be filed prior to exploration operations associated with in situ bitumen recovery operations as detailed in the Code of Practice.

3.3. Wells and Production Facilities

Wells and production facilities are structures used for the extraction, storage and processing of petroleum-related substances (e.g., gas, oil, bitumen, heavy oil, HPV, LVP, salt water), and include wells, compressor stations, batteries, satellites and plants, but not sour gas plants. Sweet wells and production facilities do not contain H₂S and do not separate any sulphur compounds. Sour wells and production facilities contain H₂S and may separate sulphur compounds. Pipelines and sour gas plants are described in this guide as separate activities.

Table 4: Wells and Production Energy Development Licences

AUTHORIZATION	DESCRIPTION
SUSTAINABLE RESOURCE DEVELOPMENT	
<p><u>Public Lands Act Approvals</u></p>	<p>Mineral Surface Lease (MSL): Issued to mineral producers and grant exclusive surface rights for surface mining and quarries, wellsites for oil and gas extraction, heavy oil/in situ oil sands and battery sites, or for other purposes incidental to the recovery and production of minerals. The maximum term is 25 years and is renewable.</p> <p>Miscellaneous Lease (MLL): May be issued for a variety of purposes that are not specifically covered by regulations under the Public Lands Act (e.g., commercial site, refinery, processing plant, landfills, and plant site). These leases are normally issued for 10 years, with the maximum term being 25 years, which is renewable.</p> <p>Miscellaneous Permit (MLP): Issued for a variety of purposes that are not specifically covered by regulations under the Public Lands Act (e.g., industrial campsites) but are for short-term use (1 year maximum). If the land continues to be used for the purpose stated in the permit after three years, the permit may be converted to a miscellaneous lease based on recommendation of the appropriate area land manager.</p> <p>Temporary Field Authority (TFA): Authorized as any other disposition granted by the Crown. It provides for the issuance of a short-term (less than 1 year) disposition under the Public Lands Act and Mines and Minerals Act. These authorizations may be issued for range improvement, borrow pits, remote sumps or other temporary activity. The <u>TFA Manual</u> provides more details.</p>
ERCB	
<p><u>Energy Development Licence</u></p>	<p>Under the ERCB Directive 056: Energy Development Applications and Schedules, any petroleum industry development that includes wells, pipelines or other structures (i.e. compressor stations, batteries, satellites and plants) requires a licence from the ERCB to construct and operate. The ERCB’s requirements are primarily intended to ensure environmental protection, public safety, resource management, compliance assurance and that potentially affected stakeholders’ issues have been examined. Authorizations also form the basis of the primary record of information about oil and gas activity in the province. For further details on the ERCB Energy Development Licences see Directive 056: Energy Development Applications and Schedules.</p>
<p><u>Emergency Response Authorization</u></p>	<p>Directive 071: Emergency Preparedness and Response Requirements for the Petroleum Industry. In cases where a well, pipeline or facility contains a hazardous product such as sour gas, an activity specific emergency response plan may be required for review.</p>
<p><u>Drilling Waste Management Authorization</u></p>	<p>Directive 050: Drilling Waste Management. Details requirements for land disposal of drilling waste. Some of the disposal methods require upfront approval. Drilling waste not being managed by a land disposal method set out in Directive 050 must be managed in accordance with Directive 058: Oilfield Waste Management Requirements for the Upstream Petroleum Industry.</p>

AUTHORIZATION	DESCRIPTION
	Depending on the anticipated method of waste disposal, there may be differing information requirements at various times during the drilling/disposal process.
<u>Oilfield Waste Management Authorization</u>	Directive 058. Details requirements for the characterization, classification, tracking, and management (e.g., treatment, processing, disposal) of oilfield wastes. Waste management methods vary in complexity and requirements are specific to each method.
<u>Injection and Disposal Wells</u>	An application is required for all proposed injection wells. The application requirements are listed in Directive 065: Resources Applications for Conventional Oil and Gas Reservoirs. The wellbore and fluid/waste quality requirements are listed in Directive 051: Injection and Disposal Wells - Well Classifications Completion, Logging and Testing Requirements. This directive sets out the technical requirements of a wellbore intended for use as an injection well.
<u>Resource or Pool Development Applications</u>	Directive 065: Resources Applications for Conventional Oil and Gas Reservoirs. An application is required to gain authorization for commingling, well spacing, enhanced recovery and disposal schemes, changes to oil well production rate administration, equity matters such as rateable take and compulsory pooling, pool delineation and gas removal. The purpose of resource authorizations is to facilitate reservoir conservation, resource equity between owners and orderly development of the resource.
<u>Flare Permits</u>	Directive 060: Upstream Petroleum Industry Flaring, Incinerating, and Venting. Includes a number of requirements governing the flaring and venting of petroleum products. Permits/authorizations to flare/incinerate are required in some, but not all, cases. For example, flare permits are needed for well clean-up and testing but are not required for licensed production facilities that incorporate flares.
ALBERTA ENVIRONMENT	
<u>Water Act Licence</u>	Required for diversions of non saline water such as for hydrostatic testing, fracing, making drilling fluid, and dust control. Under the Water (Ministerial) Regulation "saline groundwater" means water that has a total dissolved solids exceeding 4000 milligrams per litre. <u>Temporary diversions of water for hydrostatic testing of pipelines</u> are exempt from requiring a licence provided the diversion follows the applicable code of practice requirements. Examples of other diversions requiring licences may include dewatering for coal bed methane extraction, and providing water supply for injection.
<u>Water Act Approval</u>	Required for activity that may or does affect water management (surface and ground water), subject to exemptions in the Water (Ministerial) Regulation. Typical activities include pipeline and road crossings of watercourses and water bodies, erosion control installations, and activity in flood plains. Written Notice under the Water (Ministerial) Regulation is a streamlined process for activities that are exempt from an approval provided the activities are carried out according to the applicable codes of practice including: <u>pipelines and telecommunication lines crossing a water body; watercourse crossings, and outfall structures.</u>

AUTHORIZATION	DESCRIPTION
<u>Environmental Protection and Enhancement Act</u> <u>Environmental Impact Assessment</u>	Sweet gas plants are exempt from an environmental impact assessment if they emit less than 384 kg of oxides of nitrogen per day. The drilling, construction, operation or reclamation of an oil or gas well is exempt from an environmental impact assessment.
<u>Environmental Protection and Enhancement Act</u> <u>Approval</u>	<u>Environmental Protection and Enhancement Act</u> approval is required for: hydrostatic testing of vessels, impoundments, or pipes that generate greater than 1000 cubic metres of water (this does not include petroleum liquid pipelines or gas pipelines); conservation and reclamation of oil production sites; and for the construction, operation, and reclamation of sweet gas processing plants that release industrial wastewater to the environment other than by evaporation, by injection into an approved deep well facility or by directing the industrial wastewater to a wastewater treatment plant. Sour Gas plant requirements are described in <u>Table 6</u> .
<u>Environmental Protection and Enhancement Act</u> <u>Registration</u>	Registration under an <u>Environmental Protection and Enhancement Act Code of Practice</u> is required to release water from hydrostatic testing of pipelines, and for a <u>compressor and pumping station or sweet gas processing plant</u> as detailed in the applicable Code of Practice.

3.4. Pipelines

Pipelines are used to transport substances such as natural gas, oil, bitumen, heavy oil, water, produced water, and oilfield waste etc. See the **Activities Designation Regulation** for a definition of pipelines for **Environmental Protection and Enhancement Act** authorizations.

Table 5: Pipeline Authorizations

AUTHORIZATION	DESCRIPTION
SUSTAINABLE RESOURCE DEVELOPMENT	
<u>Public Lands Act</u> <u>Approval</u>	<p>Pipeline Agreements (PLAs). Authorize construction of a pipeline or flowline within the right-of-way, and construction of right-of-way installations incidental to the pipeline (e.g., valve, valve box, connection, foundation). The agreement may remain in effect for as long as required.</p> <p>Pipeline Installation Leases (PIL): Grant exclusive surface rights for surface right-of-way installations (generally off the right-of-way) that are incidental to pipeline operation (e.g., pumping station, compressor site, metering facility). The maximum term is 25 years and is renewable.</p> <p>Temporary Field Authority (TFA): Authorized as any other disposition granted by the Crown. It provides for the issuance of a short-term (less than 1 year) disposition under the <u>Public Lands Act</u> and <u>Mines and Minerals Act</u>. These authorizations may be issued for range improvement, borrow pits, remote sumps or other temporary activity. The <u>TFA Manual</u> provides more details.</p>

AUTHORIZATION	DESCRIPTION
ERCB	
<u>Energy Development Licence</u>	<p>Under the ERCB <u>Directive 056: Energy Development Applications and Schedules</u>, any petroleum industry development that includes wells, pipelines or other structures (i.e. compressor stations, batteries, satellites and plants) requires a licence from the ERCB to construct and operate. The ERCB's requirements are primarily intended to ensure environmental protection, public safety, resource management, compliance assurance and that potentially affected stakeholders' issues have been examined. Authorizations also form the basis of the primary record of information about oil and gas activity in the province. For further details on the ERCB Energy Development Licences see <u>Directive 056</u>.</p> <p>Pipelines referred to in this guide are gathering systems and do not include major transmission pipelines. Major rate-regulated pipelines are regulated by the Alberta Utilities Commission, with the exception of TransCanada Pipelines and their affiliates, including Nova Pipelines, which are regulated by the National Energy Board.</p> <p><u>Directive 077: Pipelines-Requirements and Reference Tools</u> amalgamates ERCB directives, information letters, interpretive documents, and reference tools related to pipelines into one document. <u>Directive 077</u> supplements the Pipeline Act and Regulation and CSA Z662.</p>
<u>Emergency Response Authorization</u>	<p><u>Directive 071: Emergency Preparedness and Response Requirements for the Petroleum Industry</u>. In cases where a well, pipeline or facility contains a hazardous product such as sour gas, an activity specific emergency response plan may be required for review.</p>
ALBERTA ENVIRONMENT	
<u>Water Act Notice</u>	<p>Written notice under the <u>Water (Ministerial) Regulation</u> is a streamlined process for activities and water diversions that are exempt from an approval or licence provided they follow an approved code of practice. The Codes of Practice relevant to pipeline activities include: <u>Pipelines and Telecommunication Lines Crossing a Water Body; Outfall Structures on Water Bodies</u>; and <u>Temporary Diversion of Water for Hydrostatic Testing of Pipelines</u></p>
<u>Water Act Licence</u>	<p>Licences under the <u>Water Act</u> are required for all diversions (e.g., withdrawals, storage) of non saline water, subject to some exemptions. Typical diversions for pipelines include temporary water diversions for hydrostatic testing of pipelines and for controlling dust. Diversions of water for hydrostatic testing of pipelines are exempt from requiring a licence provided the applicable code of practice requirements are met</p>
<u>Water Act Approval</u>	<p>Approvals under the <u>Water Act</u> are required for any activity that may or does affect water management (surface and ground water), subject to exemptions in the <u>Water (Ministerial) Regulation</u>. Typical activities associated with pipeline include pipeline and road crossings of watercourses and water bodies, erosion control installations, and activity in flood plains. Construction of</p>

AUTHORIZATION	DESCRIPTION
	pipelines and/or telecommunication lines crossing a water body, water course crossings and outfalls are exempt from an approval under the <u>Water Act</u> provided they are done according to the applicable codes of practice.
<u>Environmental Protection and Enhancement Act</u> <u>Environmental Impact Assessment</u>	A pipeline may require an environmental impact assessment if it has a length in kilometres times diameter in millimetres resulting in an index number of more than 2690.
<u>Environmental Protection and Enhancement Act</u> <u>Approval</u>	<u>Environmental Protection and Enhancement Act</u> approval is required for conservation and reclamation of pipelines with an index number greater than 2690. <u>Environmental Protection and Enhancement Act</u> approval may also be required for hydrostatic testing of vessels, impoundments, or pipes that generate greater than 1000 cubic metres of water (this does not include petroleum liquid pipelines or gas pipelines)
<u>Environmental Protection and Enhancement Act</u> <u>Registration</u>	Registration under the <u>Environmental Protection and Enhancement Act Code of Practice for the Release of Hydrostatic Test Water from Hydrostatic Testing of Petroleum Liquid and Gas Pipelines</u> must be obtained for the release of water from hydrostatic testing of pipelines as detailed in the Code of Practice.

3.5. Sour Gas Plants

Sour gas plants process raw gas and separate and remove sulphur compounds from the raw gas stream.

Table 6: Sour Gas Plant Authorizations

ACTIVITY	DESCRIPTION OF AUTHORIZATIONS
SUSTAINABLE RESOURCE DEVELOPMENT	
<u>Public Lands Act</u> <u>Approvals</u>	<p>Mineral Surface Lease (MSL): Issued to mineral producers and grant exclusive surface rights for surface mining and quarries, wellsites for oil and gas extraction, heavy oil/in situ oil sands and battery sites, or for other purposes incidental to the recovery and production of minerals. The maximum term is 25 years and is renewable.</p> <p>Miscellaneous Lease (MLL): May be issued for a variety of purposes that are not specifically covered by regulations under the <u>Public Lands Act</u> (e.g., commercial site, refinery, processing plant, landfills, and plant site). These leases are normally issued for 10 years, with the maximum term being 25 years, which is renewable.</p> <p>Miscellaneous Permit (MLP): Issued for a variety of purposes that are not specifically covered by regulations under the <u>Public Lands Act</u> (e.g., industrial campsites) but are for short-term use (1 year maximum). If the land continues to be used for the purpose stated in the permit after three years, the permit may be converted to a miscellaneous lease based on recommendation of the</p>

ACTIVITY	DESCRIPTION OF AUTHORIZATIONS
	<p>appropriate area land manager.</p> <p>Temporary Field Authority (TFA): Authorized as any other disposition granted by the Crown. It provides for the issuance of a short-term (less than 1 year) disposition under the <u>Public Lands Act</u> and <u>Mines and Minerals Act</u>. These authorizations may be issued for range improvement, borrow pits, remote sumps or other temporary activity. The <u>TFA Manual</u> provides more details.</p>
ERCB	
<u>Energy Development Licence</u>	<p>Under the ERCB <u>Directive 056</u>, any petroleum industry development that includes wells, pipelines or other structures (i.e. compressor stations, batteries, satellites and plants) requires a licence from the ERCB to construct and operate. The ERCB's requirements are primarily intended to ensure environmental protection, public safety, resource management, compliance assurance and that potentially affected stakeholders' issues have been examined. Authorizations also form the basis of the primary record of information about oil and gas activity in the province. For further details on the ERCB Energy Development Licences see <u>Directive 056: Energy Development Applications and Schedules</u>.</p>
<u>Emergency Response Authorization</u>	<p><u>Directive 071: Emergency Preparedness and Response Requirements for the Petroleum Industry</u>. In cases where a well, pipeline or facility contains a hazardous product such as sour gas, an activity specific emergency response plan may be required for review.</p>
<u>Flare Permits</u>	<p><u>Directive 060: Upstream Petroleum Industry Flaring, Incinerating, and Venting</u>. Includes a number of requirements governing the flaring and venting of petroleum products. Permits/authorizations to flare/incinerate are required in some, but not all, cases. For example, flare permits are needed for well clean-up and testing but are not required for licensed production facilities that incorporate flares. Conditions around flaring can also be found in <u>Environmental Protection and Enhancement Act</u> approvals for sour gas plants.</p>
ALBERTA ENVIRONMENT	
<u>Water Act Licence</u>	<p>Required for all diversions (e.g., withdrawals, storage) of non saline water, subject to some exemptions. Under the <u>Water (Ministerial) Regulation</u> "saline groundwater" means water that has a total dissolved solids exceeding 4000 milligrams per litre. Typical water diversions related to a sour gas plant may include dust control, processing, and washing.</p>
<u>Water Act Approval</u>	<p>Required for any activity that may or does affect water management (surface and ground water), subject to exemptions in the <u>Water (Ministerial) Regulation</u>. Typical activities for a sour gas plant may include erosion control installations, and activity in flood plains.</p>
<u>Water Act Notice</u>	<p>Written notice under the <u>Water (Ministerial) Regulation</u> is a streamlined process for activities that are exempt from an approval provided they are done according to the applicable code of practice. The <u>Code of Practice for Outfall Structures on Water Bodies</u> may be relevant to a sour gas plant.</p>

ACTIVITY	DESCRIPTION OF AUTHORIZATIONS
<u>Environmental Protection and Enhancement Act</u> Environmental Impact Assessment	An environmental impact assessment is mandatory for the construction, operation or reclamation of a sour gas plant that emits more than 2.8 tonnes of sulphur per day. The <u>Sulfur Recovery Guidelines (2001-3)</u> should be referred to.
<u>Environmental Protection and Enhancement Act</u> Approval	<u>Environmental Protection and Enhancement Act</u> approval is needed for a plant that processes raw gas and separates and removes sulphur compounds from the raw gas stream. <u>Environmental Protection and Enhancement Act</u> approval may also be required for: hydrostatic testing of vessels, impoundments, or pipes that generate greater than 1000 cubic metres of water (this does not include petroleum liquid pipelines or gas pipelines); and the conservation and reclamation of oil production sites. The <u>Sulfur Recovery Guidelines (2001-3)</u> should be referred to.
<u>Environmental Protection and Enhancement Act</u> Registration	Registration under the <u>Environmental Protection and Enhancement Act Code of Practice for the Release of Hydrostatic Test Water from Hydrostatic Testing of Petroleum Liquid and Gas Pipelines</u> must be obtained for the release of water from hydrostatic testing of pipelines as detailed in the Code of Practice.

3.6. Oilfield Waste Management Facilities (including Upstream Oil and Gas landfill sites)

Oilfield waste management facilities—including on-site landfills—manage, treat and dispose of oilfield waste. Responsibility for the regulation of wastes in Alberta is divided between the ERCB and AENV. The ERCB regulates facilities and activities established to manage oilfield wastes, while AENV regulates facilities and activities established to manage non-oilfield wastes and mixtures of non-oilfield and oilfield wastes. On public land managed by SRD, SRD issues the surface disposition for landfills. Jurisdictional details are provided in ERCB ID 2000-03: Harmonization of Waste Management and Memorandum of Understanding Between the Alberta Energy and Utilities Board and Alberta Environment.

ERCB Directive 058 defines the different types of oilfield waste management facilities design and outlines their operational requirements. Oilfield wastes are those wastes generated from the construction, operation, abandonment, or reclamation of ERCB-regulated wells, pipelines or facilities as defined in the Oil and Gas Conservation Act.

Directive 058 also outlines requirements that oilfield waste generators must use to characterize, classify, and track oilfield wastes. Oilfield wastes can be sent to AENV-regulated waste management facilities provided the direction and restrictions set out in Directive 058 and the Waste Control Regulation are followed. There are additional restrictions based on the properties of oilfield waste and the type of receiving facility. Additional information can be found in ERCB ID 99-04 and ID 2000-04.

Table 7 deals specifically with authorizations required for oilfield waste management facilities. It applies to EPEA regulated facilities that accept non-oilfield wastes and oilfield wastes. Additional information on these facilities is available in applicable EPEA legislation and approvals.

Table 7: Oilfield Waste Management Facilities Authorizations

AUTHORIZATION	DESCRIPTION
Sustainable Resource Development	
<u>Public Lands Act Approval</u>	Miscellaneous Lease (MLL): May be issued for a variety of purposes that are not specifically covered by regulations under the <u>Public Lands Act</u> (e.g., commercial site, refinery, processing plant, landfills, and plant site). These leases are normally issued for 10 years, with the maximum term being 25 years, which is renewable.
ERCB	
<u>Oilfield Waste Management Facility/Component Authorization</u>	<u>Directive 058: Oilfield Waste Management Requirements for the Upstream Petroleum Industry</u> sets the ERCB's expectations on how Alberta's upstream oil and gas industry will manage oilfield waste. It also sets out the design and operational requirements of oilfield waste management facilities. Part E of ERCB Directive 058 sets out the information that must be submitted in an application for approval to construct and operate an oilfield waste management facility. ERCB approval requirements depend on the type of facility, the proposed site, and the type and source of oilfield waste. <u>Directive 058 – Addendum 2008-12-23</u> sets out a notification procedure for minor modifications to existing, approved oilfield waste management facilities and identifies those modifications that require an application to amend the oilfield waste management facility approval.
<u>Injection and Disposal Wells</u>	An application is required for all proposed subsurface injection schemes. The application requirements are listed in <u>Directive 065: Resources Applications for Conventional Oil and Gas Reservoirs</u> . The wellbore and fluid/waste quality requirements are listed in <u>Directive 051: Injection and Disposal Wells - Well Classifications Completion, Logging and Testing Requirements</u> .
ALBERTA ENVIRONMENT (AENV)	
<u>Water Act Licence</u>	Required for all diversions (e.g., withdrawals, storage) of non saline water, subject to some exemptions. Typical diversions include temporary water diversions for hydrostatic testing, drilling fluid, and dust control. <u>Temporary diversions of water for hydrostatic testing of pipelines</u> are exempt from requiring a licence provided the diversion follows the code of practice requirements.
<u>Water Act Approval</u>	Required for any activity that may or does affect water management (surface and ground water), subject to exemptions in the <u>Water (Ministerial) Regulation</u> . Typical activities includes pipeline and road crossings of watercourses and water bodies, erosion control installations, and activity in flood plains. Written notice under the <u>Water (Ministerial) Regulation</u> is a streamlined process for activities that are exempt from an approval provided they are done according to a code of practice.
<u>Environmental Protection and Enhancement Act Environmental Impact Assessment</u>	EPEA regulations require an Environmental Impact Assessment for some types of oilfield waste management facilities; for example, the ERCB would refer an application for an off-site thermal treatment facility or oilfield waste landfill which is targeting the receipt of dangerous oilfield wastes to Alberta Environment for an Environmental Impact Assessment. In addition, as deemed necessary by the ERCB, other applications may be referred to Alberta Environment for an Environmental Impact Assessment.

3.7. Roads and other Linear Disturbances

Roads, trails, water body crossings and other linear disturbances provide permanent, temporary, and seasonal access to upstream oil and gas activities and facilities.

Table 8: Roads and other Linear Disturbance Authorizations

AUTHORIZATION	DESCRIPTION
SUSTAINABLE RESOURCE DEVELOPMENT	
<p><u>Public Lands Act Approvals</u></p>	<p>Licence of Occupation (LOC): Grants the right to occupy public lands for an approved purpose, and may be subject to other dispositions granted for the same area. They are issued primarily for access roads, but may also be issued for other purposes (e.g., water intake/outfall sites, pier sites, airstrips, reservoirs). The LOC does not grant any other right to the land. The term of the licence varies depending on the purpose.</p> <p>Temporary Field Authority (TFA): Authorized as any other disposition granted by the Crown. It provides for the issuance of a short-term (less than 1 year) disposition under the <u>Public Lands Act</u> and <u>Mines and Minerals Act</u>. These authorizations may be issued for range improvement, borrow pits, remote sumps or other temporary activity. The <u>TFA Manual</u> provides more details.</p>
ALBERTA ENVIRONMENT	
<p><u>Water Act Approval</u></p>	<p>Approvals under Alberta’s <u>Water Act</u> are required for any activity that could affect the management of the Province’s water resources including those that disturb or may disturb surface or groundwater (i.e., construction in, on, under, over or adjacent to a water body or groundwater). Examples of linear disturbance activities that may require a <u>Water Act</u> approval include construction of causeways, water course realignments, erosion protection, de-watering, and construction of habitat replacement in water bodies. Some linear disturbance activities are exempt from <u>Water Act</u> approvals provided the activity is conducted according to a code of practice (e.g., <u>watercourse crossings</u>, and <u>outfall structures</u>) including providing adequate notice. Other activities such as some temporary bridges are exempt from <u>Water Act</u> approvals under specific conditions set out in the <u>Water (Ministerial) Regulation</u>.</p>
<p><u>Water Act Licence</u></p>	<p>Licences under Alberta’s <u>Water Act</u> are required for any water diversions (including surface or non saline groundwater). Examples of diversions of water associated with linear disturbances that require a licence include water diversions for dust control. Some diversions such as for dust control in the Green Area of Alberta are exempt from <u>Water Act</u> licences under specific conditions set out in the <u>Water (Ministerial) Regulation</u>.</p>

4. Authorization Descriptions (see Table 9 to 29)

This section provides an overview of key authorization processes required for upstream oil and gas activities. The descriptions do not include detailed application information or technical requirements. Detailed information can be found on the relevant agency websites and/or by contacting the appropriate regulatory authorities directly.

- Petroleum and Natural Gas Tenure Agreement Authorization
- Oil Sands Tenure Agreement Authorization
- Public Lands Act Dispositions
- Surface Rights Board
- **Water Act** Licence
- **Water Act** Approval
- **Water Act** Notice (for Codes of Practice)
- **Environmental Protection and Enhancement Act** Approval
- **Environmental Protection and Enhancement Act** Registration
- **Environmental Protection and Enhancement Act** Notice
- **Environmental Protection and Enhancement Act** Environmental Impact Assessment
- **Environmental Protection and Enhancement Act** Remediation Certificate
- **Environmental Protection and Enhancement Act** Reclamation Certificate
- In situ Recovery Scheme Approval
- Energy Development Licences (wells, pipelines, and facilities)
- Resource or Pool Development Applications
- Emergency Response Authorization
- Flare Permits
- Injection and Disposal Wells
- Drilling Waste Management
- Oilfield Waste Management Facility Authorization

Table 9: Petroleum and Natural Gas Tenure Agreement Authorization - Petroleum and Natural Gas Tenure Regulation

Table 9: Petroleum and Natural Gas Tenure Agreement Authorization - Petroleum and Natural Gas Tenure Regulation	
Purpose of Authorization	<ul style="list-style-type: none"> • Authorizes disposition of petroleum and natural gas licences and leases which grant the right to drill for and recover oil and gas. • Ensures that petroleum and natural gas agreements are productive or the rights are returned to the province. • Ensures that equity is maintained for Alberta’s Crown mineral rights. • The intent is orderly development of the province’s oil, gas and other mineral rights essential to the viability of the non-renewable resource industries and the provincial economy. <p>Hyperlinks:</p> <ul style="list-style-type: none"> • <u>Mines and Minerals Act</u> • <u>Petroleum and Natural Gas Tenure Regulation</u> • <u>Tenure information</u> • <u>Tenure Guides</u>
Agency Responsible	Alberta Energy
Description of Authorization Process	<p>High-level Overview of Authorization Process:</p> <ul style="list-style-type: none"> • Sales of petroleum and natural gas rights are initiated by posting requests submitted by industry. • Alberta Energy posts available rights in a public offering notice eight weeks in advance of the sale and then issues an agreement to the highest bidder for each parcel. • If there is activity (i.e., drill, recover or remove authorized substances) or productivity can be mapped onto the agreement from other lands, they can apply for continuation or validation, which can be rejected and the lands are returned to the land bank. • Some companies do not apply at expiry and Alberta Energy cancels the agreement and rights go back into the land bank and the cycle starts again. • Other times the information submitted by the company does not prove the agreement productive, and the rights go back into the land bank for future posting and re-sale. • Leases and licences have similar obligations with two main exceptions: <ul style="list-style-type: none"> ○ Licences are exploratory agreements and have either a two, four or five year term depending on location in the province ○ Initial term licences carry an obligation to drill a well to evaluate the rights in the licence; ○ Leases and intermediate term licences must prove they are productive at the end of their five-year term. They expire unless the holder can prove that it is capable of producing petroleum and/or natural gas.

Table 9: Petroleum and Natural Gas Tenure Agreement Authorization - Petroleum and Natural Gas Tenure Regulation

	<p>Application Process / Authorization Requirements Details:</p> <ul style="list-style-type: none"> Refer to specific information on the Alberta Energy's website <p>Petroleum and Natural Gas Sales: Companies request parcels of land be included in the public offering process for a variety of reasons—protection acreage around development plays, prospects, exploration and/or development. Public offerings (or sales) of petroleum and natural gas rights are a competitive bid auction process under the <u>Petroleum and Natural Gas Tenure Regulation</u>. Sales are held on average every two weeks. After each sale, Crown petroleum and natural gas rights are issued in the form of licences or leases to the highest bidder on each parcel. The agreements convey the exclusive right to drill for and recover the leased substances and the right to remove the minerals from the agreement location. If very specific requirements are met, proponents may also apply for a direct purchase, or private sale, of petroleum and natural gas rights.</p> <p>When industry reviews posted lands, an addendum may be used to identify access restrictions. The addenda are: no surface access; restricted surface access or no restrictions. Industry can decide whether they want to bid on the parcel based on the restriction, or adjust their bid accordingly. Surface access restrictions reflect broad government policy/planning level decisions, not on-the-ground operational conditions. There are also standard operating guidelines for each region that are not listed on the posting (such as sand dunes, setbacks from wetlands, winter access only), which could affect the amount bid by the company and each company should perform due diligence and be aware of these guidelines before requesting a parcel be posted or before bidding.</p> <p>Restrictions are only listed for Crown owned surface.</p> <p>Petroleum and Natural Gas Licences and Leases: There are two agreement types for Petroleum and Natural Gas – Licences and Leases:</p> <p>PNG Licence:</p> <ul style="list-style-type: none"> Based on the <u>Petroleum and Natural Gas Tenure Regulation</u> Alberta Energy issues a Petroleum and Natural Gas Licence to the highest bidder to drill for, recover and remove petroleum and/or natural gas for a two, four, or five year initial term, depending on the region of the province. Upon expiry, the licensee may apply for continuation of all or part of the licence subject to validating the licence's mineral rights. Initial term licences carry the obligation to evaluate rights in the licence by drilling a new well on the licence or grouping with a lease or licence on which a well is or has been drilled (i.e., re-enter a suspended or abandoned well) within the initial term. The drilling depth within a region and geological zones evaluated prorates or "earns" sections of land to continue to an intermediate term 5 year licence. An intermediate term licence must be proven productive to be continued to become an indefinite term lease. <p>PNG Lease:</p> <ul style="list-style-type: none"> Based on the Petroleum and Natural Gas Tenure Regulation, the department issues a
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Table 9: Petroleum and Natural Gas Tenure Agreement Authorization - Petroleum and Natural Gas Tenure Regulation	
	Petroleum and Natural Gas lease to the highest bidder to drill for, recover and remove Petroleum and/or Natural Gas for a primary term of five years. Upon expiry, the lessee may apply for continuation on all or part of the Petroleum and Natural Gas lease. Continued leases have an indefinite term. Primary term leases (and intermediate licences) must be proven productive at the end of their five year term. Temporary continuation may be granted if rights are potentially productive or drilling is conducted shortly before or over expiry.
Triggers	<ul style="list-style-type: none"> • Desire to acquire Crown mineral rights to explore and develop. • Industry submits posting requests because they have geological information about potential for finding petroleum and natural gas in a particular area. • Industry will also submit posting requests to purchase land around a hot play (either as a buffer to keep others away from the play, or to explore and produce). • Industry has also been known to post parcels as “red herrings” to divert competitor’s attention away from a company’s new or significant play.
Linkages to other processes	Not Applicable
Stakeholder Engagement	<ul style="list-style-type: none"> • Public engagement occurs through other processes (e.g., SRD, ERCB) • Stakeholder engagement applies to surface activities relating to development of petroleum and natural gas. Because of the nature of the public offering process, the developer or lessee is not known until the agreement is issued
Contact Information	<p>Contacts are specific to the business area - Continuations, Petroleum and Natural Gas Sales and Registrations, Units, Offsets and Trespass, Well Administration, Undisposed Rights, Freehold Mineral Tax or Unconventional Tenure.</p> <p>Click here for contact information</p>

Figure 2: Life Cycle of Crown Petroleum and Natural Gas Rights

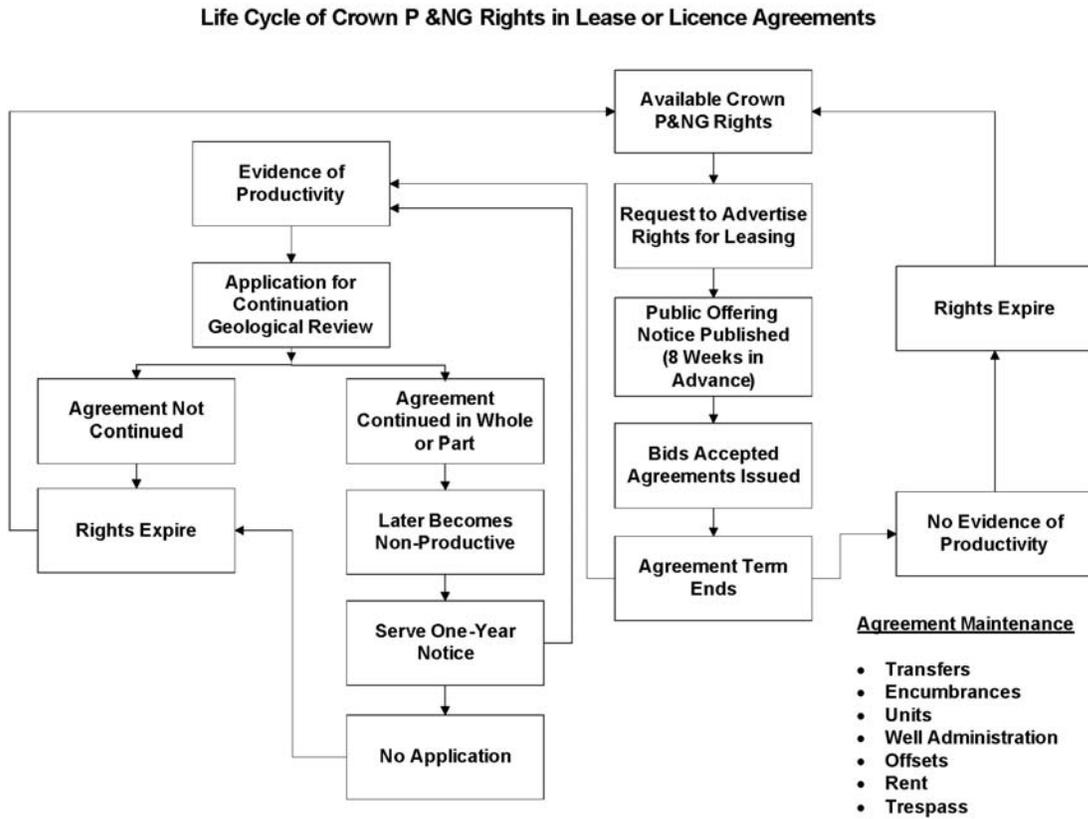


Table 10: Oil Sands Tenure Agreement Authorization

Oil Sands Tenure Agreement Authorization – Oil Sands Tenure Regulation	
Name	Description
Oil Sands Lease Agreement	Based on the <u>Oil Sands Tenure Regulation</u> Alberta Energy (the department) issues an oil sands lease agreement to the highest bidder to drill for, win, work, recover and remove oil sands for a 15 year term. Upon expiry, the lessee may continue the oil sands lease if they meet the minimum level of evaluation required for each section within the lease.
Oil Sands Permit Agreement	Based on the <u>Oil Sands Tenure Regulation</u> the department issues an oil sands permit agreement to the highest bidder to drill for, win, work, recover and remove oil sands for a 5 year term. Upon expiry, the lessee may apply for a lease selection if they meet the minimum level of evaluation required for each section.
Agency Responsible	Alberta Energy
Purpose of Authorization	<ul style="list-style-type: none"> • Authorizes disposition oil sands leases and permits, which grant the right to drill for and recover the oil sands. • The intent is orderly development of the province’s oil sands, essential to the viability of the non-renewable resource industries and the provincial economy. <p>Hyperlinks:</p> <ul style="list-style-type: none"> • <u>Mines And Minerals Act</u> • <u>Oil Sands Tenure Regulation</u> • <u>Mines And Minerals Administration Regulation</u> • <u>Oil Sands Tenure Guidelines</u>
Description of Authorization Process	<p>High-level Overview of Authorization Process:</p> <ul style="list-style-type: none"> • Sales of oil sands rights are initiated by posting requests submitted by industry. • The department posts available rights in a public offering notice eight weeks in advance of the sale and then issues an agreement (lease or permit) to the highest bidder of each parcel. • If there is activity (i.e., drill, recover, or remove authorized substances), industry can apply for continuation or lease selection. If rejected the lands are returned to the land bank. • At expiry, if no application is processed or if no application was received and there was no action on the land, the department cancels the agreement. The rights are returned to the land bank and the cycle starts again. • Leases and permits have similar obligations with 2 exceptions: <ol style="list-style-type: none"> 1. Leases have a 15 year term; Permits however, are considered exploratory and have a 5 year term. 2. Historical activities may be considered for evaluation of leases; though, only activities within the 5 year term are considered for evaluation of permits. • Leases and permits must attain the minimum level of evaluation at expiry in order to be granted continuation or lease selection.

Application Process / Authorization Requirements Details:

- Refer to specific information on Alberta Energy’s website under:

Hyperlinks:

- Click [here](#) to access forms page. Documentation includes: Electronic Transfer System (ETS) Set Up/Change Form, Direct Purchase information, Electronic Funds Transfer (EFT) Authorization Forms, and Tenure Administration forms.

Oil Sands Sales:

As the result of exploration and development, industry submits requests to the department for parcels of land to be included in the public offering process. Public offerings (or sales) of oil sands rights are held every two weeks. After each sale, Crown oil sands rights are issued in the form of permits or leases to the highest bidder on each parcel. If very specific requirements are met, clients may also apply for a direct purchase, also known as a private sale, of oil sands rights.

When industry reviews posted lands, an addendum may be used to identify surface access restrictions on Crown land. The addenda are: no surface access; restricted surface access or no restrictions. Industry can decide whether they want to bid on the parcel based on the restriction, or adjust their bid accordingly. Surface access restrictions reflect broad government policy/planning level decisions, no on-the-ground operational conditions. Based on the nature of the access restrictions, industry can decide whether they want to bid on the parcel, or adjust their bid value accordingly.

Restrictions are only listed for Crown owned surface.

Oil Sands Leases and Permits:

There are two types of agreements for oil sands:

1. Leases
2. Permits

Oil Sands Lease:

Based on the **Oil Sands Tenure Regulation**, the department issues an oil sands agreement to the highest bidder to drill for, recover and remove oil sands within the location of the agreement. Upon expiry, the lessee may apply for continuation of all or part of the lease subject to the minimum level of evaluation (MLE) attained.

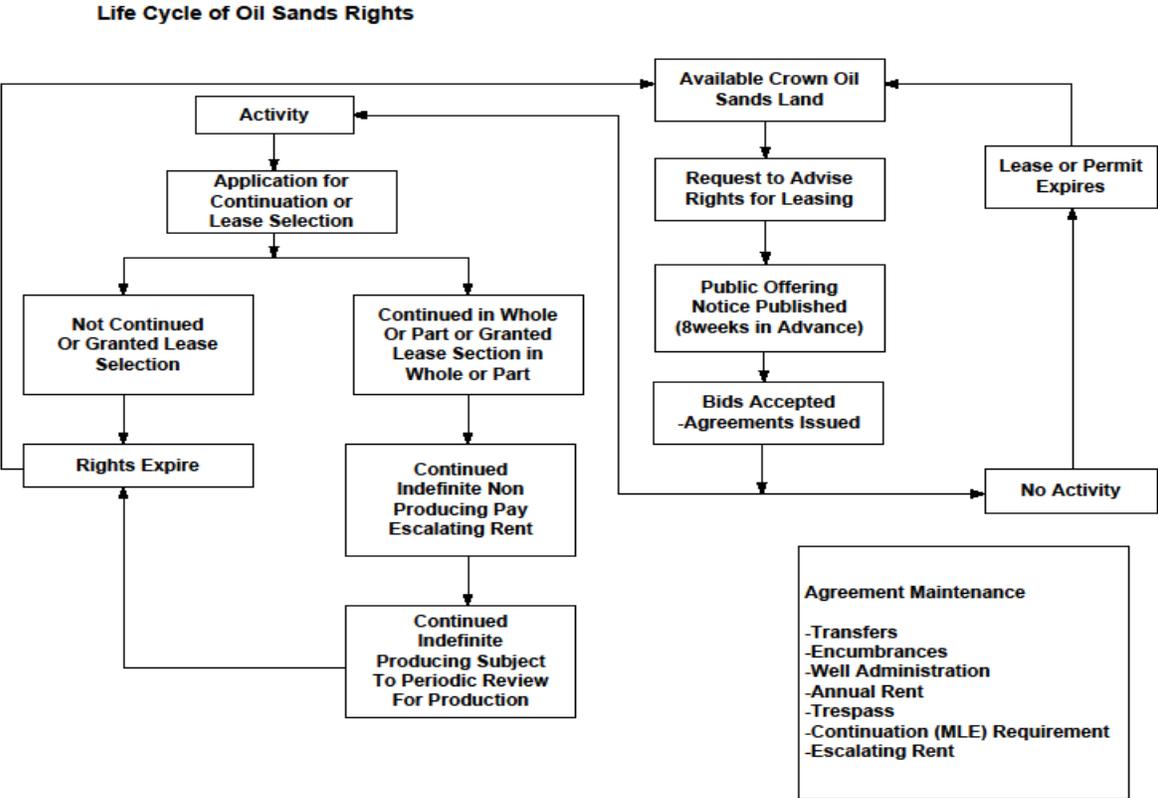
- Continued leases have an indefinite term.
- If the lease is producing at the minimum requirements then continuation with a producing status is granted.
- If continuation with a non producing status is granted, the lease is subject to escalating rent.

Oil Sands Permit:

- Based on the Oil Sands Tenure Regulation, the department issues an oil sands

	<p>permit to the highest bidder to drill for, recover and remove oil sands for a term of five years. Upon expiry, the lessee may apply for lease selection on all or part of the oil sands permit.</p> <ul style="list-style-type: none"> • If the lease selection is granted, then one or more 15 year term oil sands lease(s) are issued.
Linkages to other processes	Not Applicable
Triggers	<ul style="list-style-type: none"> • Desire to acquire Crown mineral rights to explore and develop. • Industry submits posting requests because they may have geological information.
Stakeholder Engagement	<ul style="list-style-type: none"> • Public engagement occurs through other processes (e.g., SRD, ERCB) • Stakeholder engagement applies to surface activities relating to development of oil sands. Because of the nature of the public offering process, the developer or lessee is not known until the agreement is issued
Contact Information	<p>Contacts are specific to the business area.</p> <p><u>Oil Sands Tenure Contact</u></p>

Figure 3: Life Cycle of Oil Sands Rights



Alberta Energy publishes an Information Letter. These Information Letters can be found [here](#)

The Posting Cycle

The posting cycle for public offering normally takes 17 weeks.

The Tenure Sale Process

Every January an Information Letter publishes the schedule of Public Offerings of Crown Petroleum & Natural Gas and Oil Sands Rights

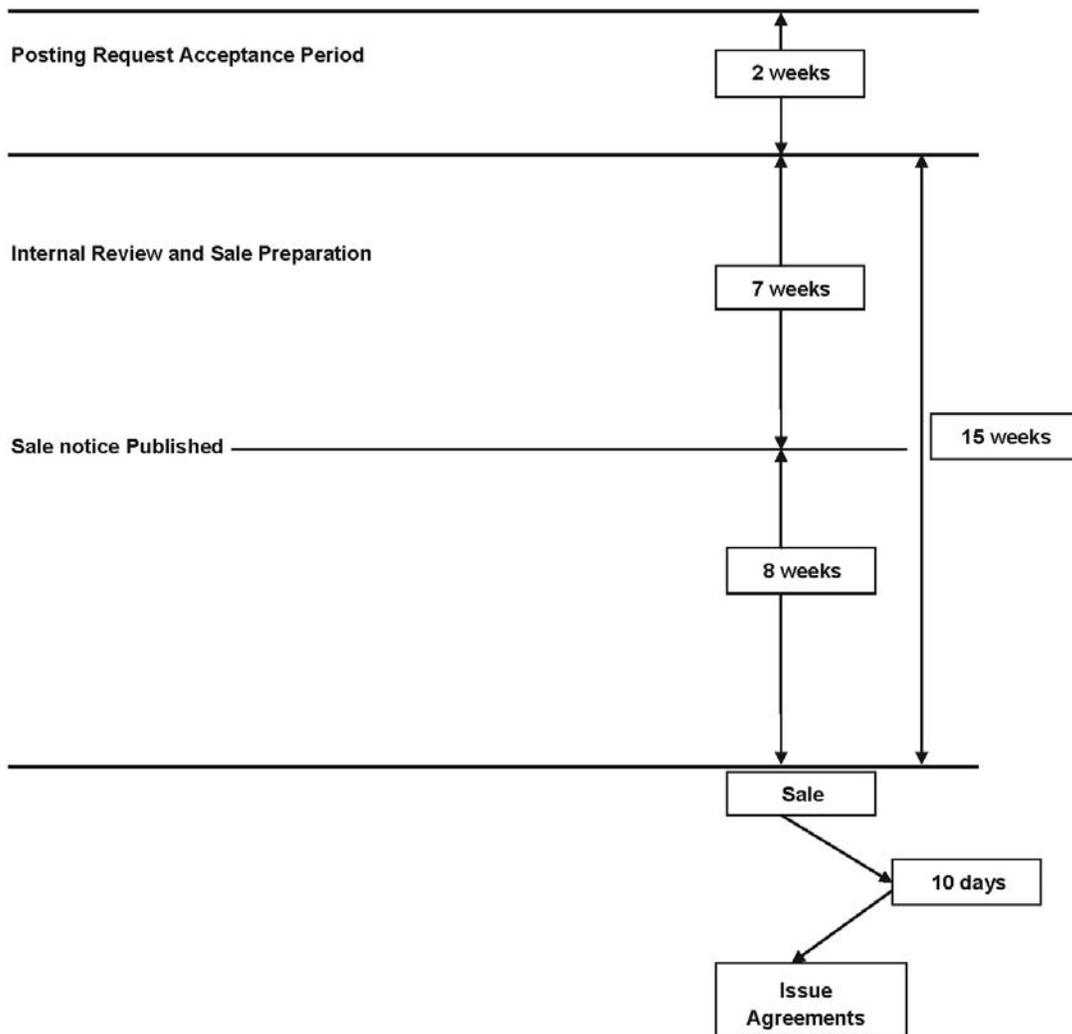


Table 11: Public Lands Act Dispositions

Public Lands Act Dispositions administered by Sustainable Resource Development	
Purpose of Authorization	<p>Upstream oil and gas activities occurring on most public lands require an authorization or disposition from Sustainable Resource Development, which allows the disposition holder access to the land to conduct their activity. For further details see the <u>Public Lands Operational Handbook</u>.</p> <p>Public Lands Act dispositions authorize upstream oil and gas activities where access to and occupation of public land that Sustainable Resource Development administers is required. Examples include, but are not limited to well site construction and operation, pipeline construction and operation.</p> <p>The intent of the authorization process is to encourage effective land use planning and to manage multiple land uses on public lands through the various application requirements. The disposition will consist of an approval that is suitable to the circumstances. If applicable, an expiration date will be included.</p> <p>Hyperlinks:</p> <ul style="list-style-type: none"> • <u>List</u> of Sustainable Resource Development Legislation • <u>Public Lands Act</u> (deals with the selling and disposition of public land, as well as the management of rangeland and other activities permitted on public land): • <u>Public Lands Operational Handbook</u>
Agency Responsible	<ul style="list-style-type: none"> • The Department of Sustainable Resource Development manages and makes the decisions regarding dispositions on public lands that Sustainable Resource Development administers. • Sustainable Resource Development works with other agencies as appropriate (e.g., works with Alberta Environment with <u>Water Act</u> codes of practice).
Description of Authorization Process	<p>High-level Overview of Authorization Process:</p> <ul style="list-style-type: none"> • An application (e.g., Enhanced Approval Process Interim Submission, Environmental Field Report) for disposition is submitted to Sustainable Resource Development. • The <u>Enhanced Approval Process (EAP)</u> is designed for upstream oil and gas submissions, excluding in situ and oil sands mines, and for the following disposition types: MSL, LOC, PIL, PLA. For PILs and PLAs, downstream oil and gas submissions are also in scope of this approval process. • For EAP applications, a short-term disposition is issued if the applicant indicates that all standards will be met. A long-term disposition is issued upon submission of a final plan. If the applicant indicates that all standards cannot be met, a field referral will occur. If the applicant and SRD can agree on appropriate mitigation for the missed standard(s), a short-term disposition will be issued; a long-term disposition is issued upon submission of a final plan. • For EFR applications (everything not included in the EAP), a Letter of Authority is issued once written consent has been received and the application is approved. • Applicants who do not obtain an approval may reapply for a disposition.

Public Lands Act Dispositions administered by Sustainable Resource Development

Application Process/Authorization Requirements Details:

- Land status should be determined. Is the land vacant or under lease?
 - Conduct a title search through the Land Titles Office (LTO) and use the Land Status Automated System (LSAS) to find out if the land is occupied.
 - If public land is occupied (includes Forest Management Agreement or grazing leaseholder), obtain written consent and send to the Lands Division.
 - If land is not occupied, obtain approval from the Lands Division.
- Contact the local Sustainable Resource Development field office to find out whether First Nations consultation is required and if yes, with which First Nations.
- Identify other land users and landscape values of the project area, and describe how these impacts will be minimized (e.g., use of common corridors) as part of their application.
- Obtain approvals from other departments as required (e.g., Historical Resources Clearance).
- Identify any reservations or notations on the land through the Land Status Automation System.
- Ensure proposed development is consistent with current government policies and guidelines (e.g., Integrated Resource Plan; Forest Land Use Zone).
- Submit the appropriate application for the activity (e.g. Enhanced Approval Process Interim Submission; Environmental Field Report).

Enhanced Approval Process (EAP) Interim Submission:

- A mandatory process that enables application and approval of standard and non-standard interim submissions for MSL, LOC for upstream oil and gas conventional and unconventional activities, and PIL or PLA for upstream and downstream oil and gas activities. Applications for insitu and oilsands operations are out of scope.
- Provides upfront planning tools including the Landscape Analysis Tool and the Integrated Standards and Guidelines.
- Applicant must consider all land users and must align with Integrated Land Management.
- Approval results in a short term disposition that provides the holder the right to the land for resource development and, if required, a long term disposition that provides the holder the right to continue using the land and producing the resource.
- Includes industry self-monitoring and self-reporting requirements for all dispositions.

Environmental Field Report(EFR):

- A mandatory component of a surface disposition application for all other **Public Lands Act** dispositions including MLL, MLP and some LOCs, not included in the EAP.
- Consists of a generic form that identifies all information requirements for surface dispositions (how they will be constructed, operated and reclaimed, etc.).
- Applicant must consider all land users and must align with Integrated Land Management.

Public Lands Act Dispositions administered by Sustainable Resource Development	
	<p>Hyperlinks:</p> <ul style="list-style-type: none"> • <u>Public Lands Act</u> • <u>Surface Rights Act</u> • Sustainable Resource Development <u>About Public Lands</u> document • <u>Public Lands Operational Handbook</u> • <u>Temporary Field Authority Manual</u> • Sustainable Resource Development <u>Land Forms</u> • Instructions for <u>submission of the Environmental Field Reports</u> • Procedures for <u>submitting the Geophysical Field Report</u> • <u>Public Lands Act Disposition and Fees Regulation</u> • <u>Enhanced Approval Process website</u>
Linkages to other processes	<ul style="list-style-type: none"> • <u>Surface Rights Act</u> • <u>ERCB Directive 056: Energy Development Applications and Schedule</u> Proponents must have a Pipeline Agreement (PLA) application number or a Mineral Surface Lease (MSL) from SRD before applying to the ERCB for oil and gas activity on public lands. • <u>Water Act</u> • <u>Environmental Protection and Enhancement Act</u>
Triggers	Desire to conduct upstream oil and gas activity on public lands as defined by the <u>Public Lands Act</u>
Stakeholder Consultation	<ul style="list-style-type: none"> • Consent from land owners or occupants must be obtained prior to application for an approval under the <u>Public Lands Act</u>. • If the activity falls within a Registered Fur Management Area, the proponent must notify the holder of the planned activity ten days prior to start-up. If trappers permits exist in the area, trappers need to be notified. • If the EAP is used, the proponent must follow the direction provided in the <u>Pre-Application Requirements and Information</u> document, ensuring project consistency with the direction given by forest land use zones, integrated resource plans, conservation and protective notations, and access management plans. • If the proponent utilizes the EFR process an explanation of how user integration will occur is required in the application. <p>EAP and EFR Consultation Requirements with First Nations:</p> <p>The Government of Alberta’s <u>First Nations Consultation Guidelines on Land Management and Resource Development</u> describes Alberta’s policy “to consult with First Nations where land management and resource development have the potential to adversely impact First Nations’ rights and traditional uses”. The guidelines require project proponents to consult with First Nations in accordance with the policy. Generally, First Nations consultation will include the following:</p> <ul style="list-style-type: none"> • The proponent should contact the <u>Sustainable Resource Development Area Office</u> early in the process to determine if the duty to consult is triggered, if Alberta is delegating the procedural aspects of consultation to the proponent, and if so, with which First Nations. • Provide early notification to either the band council or a designate of potentially adversely impacted First Nations.

Public Lands Act Dispositions administered by Sustainable Resource Development	
	<ul style="list-style-type: none"> • Provide plain language information describing the scope and location of the project, and clearly identifying those potential adverse impacts which the proponent anticipates in the short and long term. • Provide the prescribed time for First Nations to review, consider and respond to the information furnished, and follow up with the First Nation during this period. • If required, meet to discuss comments and concerns of the potentially adversely impacted First Nations. • Strategize to avoid or mitigate the potential adverse impacts the project could have on the exercise of rights and traditional uses. • Where agreement has not been reached about how to avoid or mitigate potentially adverse impacts, provide written reasons to the Government of Alberta. • Before an EAP submission can be made, the proponent must provide to the Sustainable Resource Development Area Office a summary of their consultation efforts. If adequate, a Notification of Decision letter will be issued that is to be attached to the interim submission application form through the EAP. The letter will be copied to the affected First Nation(s). • Before issuance of an EFR approval, the proponent must provide to Sustainable Resource Development a summary of their efforts to share project information, with the same summary copied to the affected First Nation(s). <p>Environmental Field Report and Information Requirements Regarding Potentially Impacted Stakeholders</p> <ul style="list-style-type: none"> • An applicant needs to identify potential impacts and describe how these impacts will be minimized as part of their application (e.g., use of common corridors). <p>Hyperlinks:</p> <ul style="list-style-type: none"> • <u>Public Lands Operational Handbook</u> • <u>Sustainable Resource Development Land Management Consultation Guidelines</u> • <u>The Government of Alberta's First Nations Consultation Policy on Land Management and Resource Development</u> • <u>SRD Area Offices</u>
Contact Information	There is a <u>Lands Program Manager</u> in each management area of Sustainable Resource Development.

Figure 4: SRD Authorization of Public Lands Act Dispositions through the Enhanced Approval Process

Enhanced Approval Process (EAP) Map (August 4, 2010)

The EAP supports enhancement of value-added activities, increased innovation and contribution to building stewardship and responsibility to promote the long term sustainability of Alberta's natural resources and the competitiveness of Alberta's economy.

Enhancements to SRD's approval process for upstream oil and gas operations will support long-term streamlining and rationalization of the natural resource regulatory system and will identify improvements that promote responsible development.

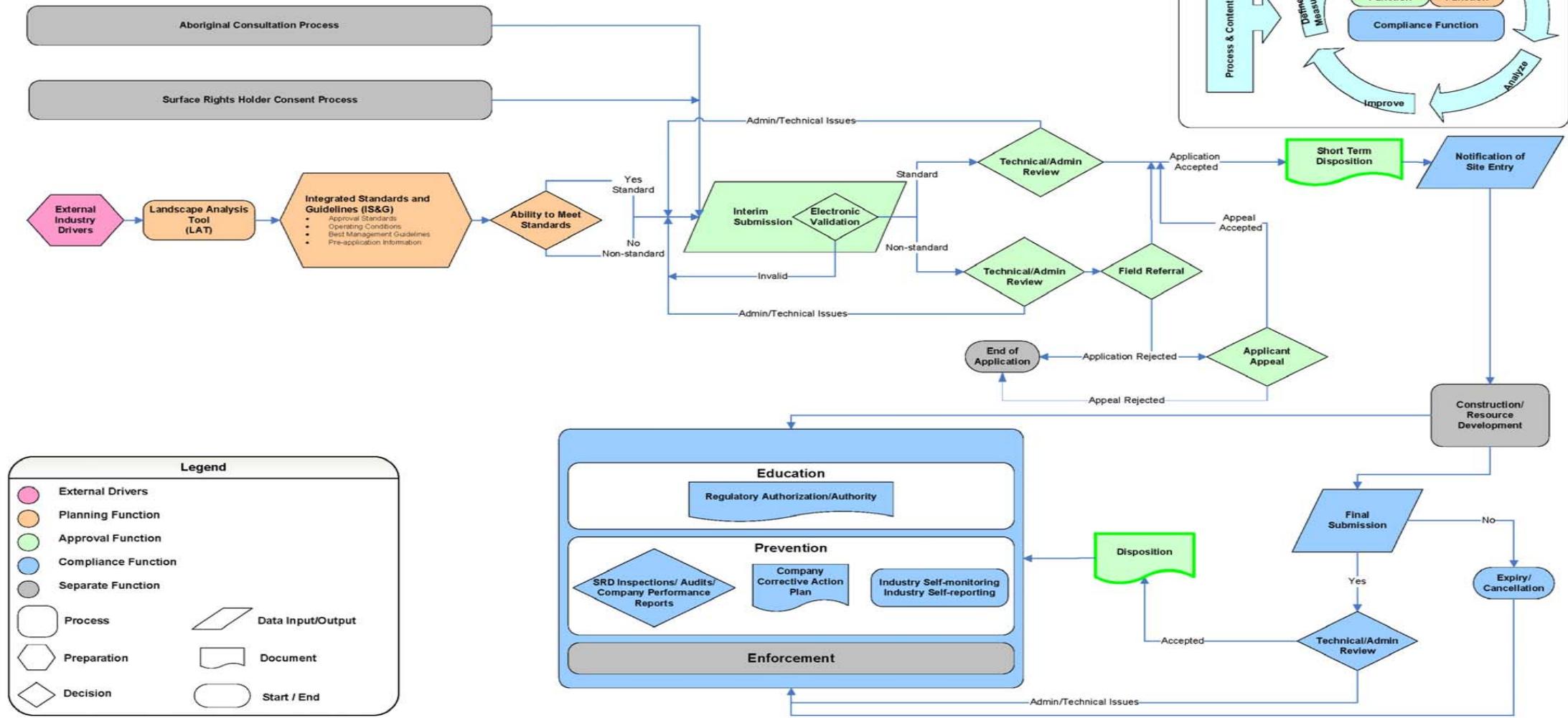


Table 12: Surface Rights Board Right of Entry

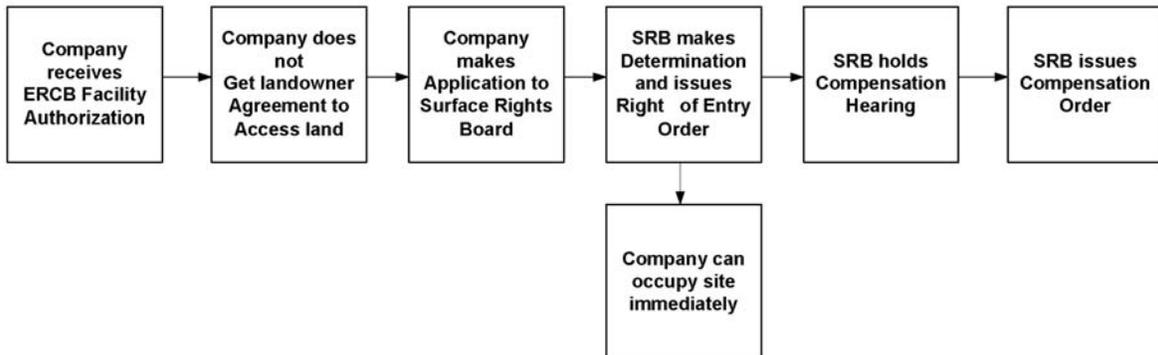
Surface Rights Board Right of Entry	
Purpose of Authorization	<ul style="list-style-type: none"> • A Right of Entry Order is issued by the Surface Rights Board under the <i>Surface Rights Act</i> to authorize entry and use of private lands when an access agreement (consent) cannot be reached between the commercial/industrial operator and the land owner. On private land, the proponent must consult and compensate the landowner. If an agreement on consent cannot be reached, then resolution may be sought through the Surface Rights Board. On public land, the proponent must get consent from the lease holder/occupant. • The Surface Rights Board is an independent adjudicative tribunal established by the Province of Alberta. The Surface Rights Board provides independent, accessible, fair, timely and impartial processes. It deals with all activities for which the consent of existing surface rights holders remain unresolved following ERCB authorization on private lands. • Primarily deals with: <ul style="list-style-type: none"> ○ <u>Right of Entry</u> ○ <u>Review of Annual Compensation</u> ○ <u>Damage Dispute</u> ○ <u>Recovery of Compensation</u> • Authorization provides the applicant with a Right of Entry Order allowing access to sites required to complete an activity approved by ERCB. Completion of the subsequent Compensation Hearing provides both the applicant and existing rights holder with a Compensation Order detailing the compensation agreement to which they will adhere. Construction may commence upon the issuance of the Right of Entry Order and does not have to wait for compensation to be addressed. Voluntary alternative dispute resolution, as well as private compensation agreements mutually reached by the parties may be adopted by the Board as part of its decision. The first step in Appropriate Dispute Resolution is a Prehearing Dispute Resolution Conference. If the parties do not resolve the dispute, a hearing is held. • A Right of Entry Order is always issued first. Then compensation proceedings are held (Section 23) if the parties do not reach an agreement through Appropriate Dispute Resolution. • The Surface Rights Board does not have authority in Métis Settlements. Access to Crown petroleum and natural gas rights is subject to conditions outlined in the Co-Management Agreement (Schedule 3 –<u>Métis Settlements Act</u>) <p>Hyperlinks:</p> <ul style="list-style-type: none"> • <u><i>Surface Rights Act</i></u> • <u><i>Surface Rights Act General Regulations</i></u> • <u>Surface Rights Board</u>
Agency Responsible	The Surface Rights Board manages the process and makes all decisions.

Surface Rights Board Right of Entry	
Description of Authorization Process	<ul style="list-style-type: none"> • The process for application for Right of Entry Order is set out in Section 15 of the <u><i>Surface Rights Act</i></u> <ul style="list-style-type: none"> ○ The operator must file an application with the Surface Rights Board along with other documents including a properly outlined plan, and a licence from the ERCB. After the application is filed the landowner and all other respondents are served with the application. Service of the application may be personal service (handing the document to the respondent) or by registered mail to the last known address (usually the address contained on the Certificate of Title). ○ The Order may be granted without a hearing after 14 days. However the Surface Rights Board has discretion to hold a hearing if the landowner objects within 14 days of being served with the application and the Surface Rights Board determines that the reasons provided for the objection warrant a hearing. ○ Orders must specify the portion of land they apply to and any conditions the Surface Rights Board considers necessary (s. 15(6)) of the <i>Surface Rights Act</i>. The legal effect of the right of entry order is significant and outlined in Section 16 of the <i>Surface Rights Act</i>. The operator through the right of entry order obtains all rights to the surface to conduct its operations other than a right to a certificate of title or the right to take sand, gravel and clay. The operator also has the right to excavate and disturb the land as necessary for the operations. ○ Prior to applying for the Right of Entry Order the operator must first contact the landowner/occupant and seek their consent for access. If the parties are unable to reach an agreement the operator may apply for a Right of Entry Order. • The process for application for hearing to determine the new rate of compensation is: <ul style="list-style-type: none"> ○ An application form from the Surface Rights Board requesting a hearing to determine the new rate of compensation, indicating the amount of annual compensation currently being received and the amount of annual compensation being requested; ○ A copy of the original agreement made with the original operator (i.e., Surface Lease) and copies of any amendments to the original agreement; ○ A copy of the plan of the leased area (which should have been attached to the original agreement) and any amendments, ensuring that the entire area granted under the lease is highlighted; and ○ Copies of correspondence (including any Notices for review) to and from the operator pertaining to negotiations with regard to the rental review. • The Surface Rights Board may hold a hearing and determine the amount of compensation payable to an owner or occupant who are parties to a surface lease or Right of Entry Order for: damages to land of the owner or occupant <u>off</u> the area granted, damages to livestock or other personal property, or time spent or expense incurred by owner/occupant to recover strayed livestock. <ul style="list-style-type: none"> ○ The application must be made within 2 years from the date the damage is alleged to have occurred. ○ The amount claimed must not exceed \$25,000.00.

Surface Rights Board Right of Entry	
Linkages to other processes	<ul style="list-style-type: none"> • <u>Public Lands Act</u> dispositions • <u>Directive 056</u> Energy Development Licences
Triggers	<ul style="list-style-type: none"> • Inability of the applicant to obtain consent of the existing surface rights holder • Disputes arising from damage to property or relating to compensation
Stakeholder Involvement	As a party to the dispute one may participate in pre-conference, mediation and hearing
Contact Information	Surface Rights Board, 18th Floor, Phipps-McKinnon Building, 10020-101A Avenue, Edmonton AB T5J 3G2 Phone: 780-427-2444 Fax: 780-427-5798 srb.lcb@gov.ab.ca

Figure 5: Surface Rights Board Right of Entry

Surface Rights Board Right of Entry



Water Act

The **Water Act** provides the following authorization and notification processes for activities and diversions of non saline water. These authorization processes are described in the **Water Act** Approvals and **Water Act** Licences tables respectively.

- **Water Act Approval:** required for any activity that could affect water management, including those that disturb, or may disturb surface water (i.e., construction in, on, under, in some cases over, or adjacent to water bodies) or water below the surface [groundwater] [i.e., water well drilling, or excavations that does or may affect groundwater]), subject to some exemptions.
- **Water Act Licence:** required for all diversions (e.g., withdrawals, storage) of non saline water, subject to some exemptions.
- **Water Act Notice (for Codes of Practice):** Notice under the *Water (Ministerial) Regulation* is a streamlined process for activities that are exempt from an approval or licence provided they follow a Code of Practice. Codes of Practice set out specific requirements to help ensure an activity minimizes the disturbance and impact on the environment. Oil and gas activities conducted in accordance with a Code of Practice include:
 - *Pipelines and Telecommunications Lines Crossing a Water Body;*
 - *Watercourse Crossings;*
 - *Outfall Structures on Water Bodies;* and
 - *Temporary Diversion of Water for Hydrostatic Testing of Pipelines*

Table 13: Water Act Licence

<u>Water Act</u> Licence	
Purpose of Authorization	<ul style="list-style-type: none"> • Ownership of all water in Alberta is vested in the Crown and therefore permission from the Crown is required prior to diverting or using water. Under the <u>Water Act</u>, water is allocated and managed based on “first in time, first in right.” <u>Water Act</u> licences provide the means for establishing an applicant’s priority in the ‘queue’ to divert water from a specific water source. • Licences under Alberta’s <u>Water Act</u> are required for most water diversions (including surface or non saline groundwater). Under the <u>Water (Ministerial) Regulation</u> "saline groundwater" means water that has a total dissolved solids exceeding 4 000 milligrams per litre. Diversions of water for hydrostatic testing of pipelines are exempt from <u>Water Act</u> licences when the code of practice for those diversions is followed and adequate notice is provided. Other diversions such as for dust control and making drilling fluid for wells on public land are exempt from <u>Water Act</u> licences under specific conditions set out in the <i>Water (Ministerial) Regulation</i>. • Temporary Licences can be issued for temporary diversions for one year or less. <p>Hyperlinks:</p> <ul style="list-style-type: none"> • <u>Water Act</u> • <u>Water Ministerial Regulation</u> (to determine which activities require Water Licences) • <u>Fact Sheet on Water Licences</u> • <u>Water Conservation and Allocation Policy/Guideline for Oilfield Injection (2006)</u>

<u>Water Act Licence</u>	
Agency Responsible	Alberta Environment manages the process and makes all decisions. Applications can be referred to other agencies for specific technical advice (i.e., to Sustainable Resource Development for technical expertise on issues relating to aquatic environments, fisheries, vegetation and wildlife).
Description of Authorization Process	<ul style="list-style-type: none"> • To apply for a <u>Water Act</u> Licence, applicants must complete and submit an application form and must include with the application accurate drawings that include: <ul style="list-style-type: none"> ○ suitable scale, north arrow, date and legal land location, tied to section or quarter-section lines; ○ water and wastewater conveyance structures such as ditches, canals, water supply lines, wastewater discharge channels, etc., as applicable; ○ location of intake structures, control structures, spillway, dam and reservoir locations, including cross- sections of structures, dams, and reservoirs; ○ layout of the water system, indicating location and extent of lands to be serviced; ○ if there is irrigation, the number of acres to be irrigated (with irrigable areas shown cross- hatched) and/or; ○ reservoir capacity elevation rating curve, as applicable; and ○ written consent for any lands or undertakings not owned by the applicant to which the licence will appertain. • Depending on the complexity of the project, applicants may be required to provide a description that includes construction specification, proposed construction schedule, operational plans, water requirements and method of operation. • Plans may also require the professional stamp of an engineer registered with the Association of Professional Engineers, Geologists and Geophysicists of Alberta • A licence may be issued where the water source can supply the needs of the applicant and the diversion of water has no adverse effect on the source, surrounding users or the environment. Licences may include conditions that require the licensee to submit water monitoring data and quantities of water diverted. • Applicants may also be required to pay a fee for the projected annual diversion. The fee is related to the annual allocation volume of water in the Licence, and described in <u>Water Act Licences: Facts at your Fingertips</u> • Licences may include conditions that requires the licensee to submit the rate of diversion and the in-stream flow needs requirement.
Linkages to other processes	Alberta Environment manages the approval process with technical input from Sustainable Resource Development and other agencies at the discretion of the Director. There is no direct input from the <u>Water Act</u> Licence process into the ERCB or Sustainable Resource Development processes.
Triggers	Generally, to divert and use surface or groundwater in Alberta a licence is required. For a list of activities that do not require a <u>Water Act</u> Licence please see the <u>Water (Ministerial) Regulation</u>
Stakeholder Consultation	<ul style="list-style-type: none"> • Applicants may be required to place a public notice of the application in appropriate newspapers or to post it at specified locations. They may also be required to consult with First Nations. While generally requiring public notice, this can be waived at the discretion of the Director. Directly affected stakeholders can submit concerns for consideration in the decision. For more information, please consult Part 8 of the <u>Water Act</u> and <i>Water (Ministerial) Regulation</i>.

<u>Water Act Licence</u>	
	<ul style="list-style-type: none"> Joint notices are sometime issued under the <u>Environmental Protection and Enhancement Act</u> and <u>Water Act</u> potentially even including the Energy Resources and Conservation Board.
Contact Information	For general enquiries, contact the Alberta Environment Information Centre Phone: (780) 427-2700 (toll free, dial 310-0000) Fax: (780) 422-4086 Hours of operation: Weekdays, 8:15 a.m. - 4:30 p.m.

Table 14: **Water Act Approval**

<u>Water Act Approval</u>	
Purpose of Authorization	<ul style="list-style-type: none"> Approvals under Alberta's <u>Water Act</u> are required for any activity that could affect the management of the Province's water resources including those that disturb or may disturb surface or groundwater (e.g., construction in, on, under, over or adjacent to a water body or groundwater). Some activities are exempt from <u>Water Act</u> approvals provided the activity is conducted according to a Code of Practice (e.g., watercourse crossings, pipeline crossings and outfall structures) including providing adequate notice. Other activities such as some temporary bridges are exempt from <u>Water Act</u> approvals under specific conditions set out in the <u>Water (Ministerial) Regulation</u> <p>Hyperlinks:</p> <ul style="list-style-type: none"> <u>Water Act</u> <u>Water Ministerial Regulation</u> (to determine which activities require <u>Water Act</u> Approvals): <u>Alberta Environment</u> website <u>Administrative Guide for Approvals to Protect Surface Water Bodies under the Water Act</u>
Agency Responsible	Alberta Environment manages the process and makes all decisions. Applications can be referred to other agencies for specific technical advice (i.e., to Sustainable Resource Development for technical expertise on issues relating to aquatic environments, fisheries, vegetation and wildlife).
Description of Authorization Process	<p>Key aspects of the Approval process:</p> <ul style="list-style-type: none"> Proponent must complete and submit an <u>application</u> for <u>Water Act</u> Approval to the Alberta Environment Director (including plans and specifications). Completed application forms must include drawings of the proposed project that include: <ul style="list-style-type: none"> suitable scale, north arrow, date and legal land location, tied to section or quarter section lines; features such as water bodies, with flow directions, roads and/or buildings such as pump houses, etc.; water and wastewater conveyance structures, such as ditches, canals, water supply lines, and/or wastewater discharge channels, where applicable location of intake structures, control structures, spillways and/or dams and reservoirs, including cross-sections of structures, dams and reservoirs; and proposed construction schedule. More complex projects may be required to provide a project description that

Water Act Approval	
	<p>includes construction specifications, operational plans and method of operation.</p> <ul style="list-style-type: none"> • Plans may require the professional stamp of an engineer registered with the Association of Professional Engineers, Geologists and Geophysicists of Alberta. • Where applicable, geotechnical information may be required for dykes and dams, as specified in the <u>Dam and Canal Safety Guidelines</u> available on the <u>Alberta Environment</u> website. • Alberta Environment recommends that the services of a Qualified Aquatic Environment Specialist be retained to undertake pre-development and post-development aquatic environment assessments when the department determines a need to develop mitigation options. The cost of the assessment is the responsibility of the company. • If the applicant for an approval does not own the land, they must also provide the Director with written approval from the landowner. • Applications are reviewed under both the <u>Water Act</u> and <u>Environmental Protection and Enhancement Act</u> by the Director(s) designated under the <u>Water Act</u> and/or the <u>Environmental Protection and Enhancement Act</u> . • The Director considers any applicable water management plans as well as any of the following factors in making a decision regarding whether or not to issue a <u>Water Act</u> Approval: <ul style="list-style-type: none"> ○ potential or cumulative effects on the aquatic environment; ○ hydraulic, hydrological and hydrogeological effects; ○ effects on household users, licensees and traditional agriculture users; ○ effects on public safety; and ○ any other matters that the Director deems relevant. • Where multiple authorizations are required, Alberta Environment can set up a single window approach. • The application becomes part of an enforceable authorization that can incorporate specific, objective conditions. • Unless otherwise waived, once an activity is completed, an approval holder needs to submit a certificate of completion certifying that the activity has been completed in accordance with the approval. • Stakeholder concerns are considered by the <u>Water Act</u> Director in their making a decision on whether to issue an Approval and what conditions may be on the approval
Linkages to other processes	<p>Alberta Environment manages the approval process with technical input from Sustainable Resource Development and other agencies at the discretion of the Director. There is little input from the <u>Water Act</u> approval process into the ERCB or the Sustainable Resource Development processes though a Memorandum of Understanding between AENV and the ERCB relating to the dam safety review of dykes and dams is in place.</p>
Triggers	<p><u>Water Act</u> Approvals are required for the construction of “works” in, over or near a water body. Water body means “any location where water flows or is present, whether or not the flow or the presence of water is continuous, intermittent or occurs only during a flood, and includes but is not limited to wetlands and aquifers but generally does not include a “water body” that is part of an irrigation works if the irrigation works is subject to a licence and the irrigation works is owned by the licensee, unless</p>

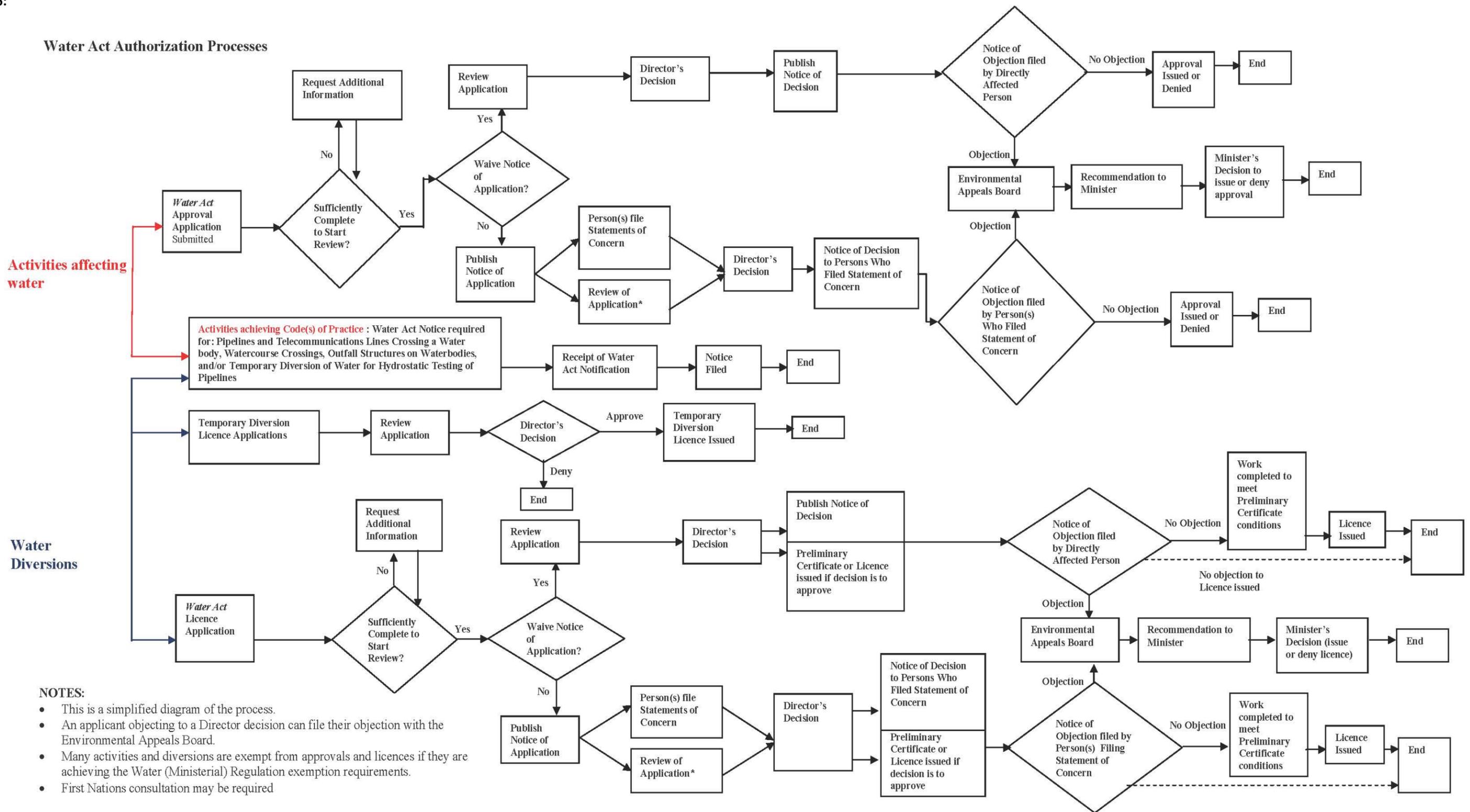
Water Act Approval	
	<p>the regulations specify that the location is included in the definition of water body. The following are some examples of activities that would require an Approval under the <u>Water Act</u>:</p> <ul style="list-style-type: none"> • partial or complete infilling of a water body for activity sites, road construction, or any other purpose; • any activity impacting or has the potential to impact (cumulative effects) the aquatic environment and involving the disturbance, alteration, or modification of a water body; • erosion protection (e.g., rip-rap, rock armouring, gabion baskets, etc); • removal or destruction of vegetation, aquatic plants and trees within the confines of bed and shores of a water body; • draining of a water body; or • re-alignment of a water body. <p>For a full list of activities exempted from approval under the <u>Water Act</u>, see the <u>Water (Ministerial) Regulation</u></p>
Stakeholder Consultation	<ul style="list-style-type: none"> • Applicants may be required to place a public notice of the application in appropriate newspapers or to post it at specified locations. They may also be required to consult with First Nations. While generally requiring public notice, this can be waived at the discretion of the Director. Directly affected stakeholders can submit concerns for consideration in the decision. For more information, please consult Part 8 of the <u>Water Act</u> and <i>Water (Ministerial) Regulation</i>. • Joint notices are sometime issued under the <u>Environmental Protection and Enhancement Act</u> and <u>Water Act</u>, potentially even including the Energy Resources and Conservation Board.
Contact Information	<p>For general enquiries, contact the Alberta Environment Information Centre Phone: (780) 427-2700 (toll free, dial 310-0000) Fax: (780) 422-4086 Hours of operation: Weekdays, 8:15 a.m. - 4:30 p.m.</p>

Table 15: Water Act Notice (for Codes of Practice)

Water Act Notice	
Purpose of Authorization	<ul style="list-style-type: none"> • The <u>Water (Ministerial) Regulation</u> defines a number of activities and diversions that do not require a <u>Water Act</u> Approval or Licence where adequate notice is provided and Codes of Practice requirements are met. The Codes of Practice detail how the activity or diversion must be undertaken to ensure it minimizes the disturbance and impact on the environment. These can include requirements for the activity to be designed by a Professional Engineer and the aquatic environment mitigation to be designed by a Qualified Aquatic Environment Specialist. Examples of these activities include: pipelines and telecommunication lines crossing a water body, outfall structures, watercourse crossings, and diversions of water for hydrostatic testing. These Codes of Practice require that an applicant submit notice to the Government of Alberta of its intent to conduct the activity.

Water Act Notice	
Agency Responsible	Alberta Environment
Description of Authorization Process	<ul style="list-style-type: none"> • Companies must ensure that the design and undertaking of their activities is in keeping with the appropriate Code of Practice. • Requirements may include the professional stamp of an engineer registered with the Association of Professional Engineers, Geologists and Geophysicists of Alberta or the services of a Qualified Aquatic Environment Specialist. • Prior to commencing the activity, companies must submit a notification of their intention to conduct an activity under a Code of Practice to the appropriate regional office of Alberta Environment. • Notification includes the completion of a notification form which must be accompanied by a location plan, diagram and/or aerial photograph. • Companies do not need to receive any approval back from Alberta Environment prior to commencing their activity.
Linkages to other processes	Not Applicable
Triggers	<ul style="list-style-type: none"> • The following activities are governed by Codes of Practice under the <u>Water (Ministerial) Regulation</u> and require written notice to Alberta Environment: <ul style="list-style-type: none"> ○ The placement, construction, installation, maintenance, replacement or removal of a pipeline or telecommunication line crossing a water body. These activities are regulated by the <u>Code of Practice for Pipelines and Telecommunication Lines Crossing a Water Body</u> ○ The placement, construction, installation, maintenance, replacement, or removal of a watercourse crossing a water body. These activities are regulated by the <u>Code of Practice for Watercourse Crossing</u> Watercourse crossings include culvert crossings, bridges or other types of structures used to provide access through, across or over a watercourse. ○ The placement, construction, installation, maintenance, replacement, or removal of an outfall structure that discharges to a water body. These activities are regulated by <u>Code of Practice for Outfall Structures on Water bodies</u> ○ The use of water for the hydrostatic testing of a pipeline is regulated by the <u>Code of Practice for the Temporary Diversion of Water for Hydrostatic Testing of Pipelines</u>
Stakeholder Consultation	Under the Codes of Practice engagement with stakeholders is not required; however it may be beneficial for the project proponent to work with stakeholders to alleviate any concerns.
Contact Information	For general enquiries, contact the Alberta Environment Information Centre Phone: (780) 427-2700 (toll free, dial 310-0000); Fax: (780) 422-4086 Hours of operation: Weekdays, 8:15 a.m. - 4:30 p.m.

Figure 6:



Environmental Protection and Enhancement Act

Under the **Activities Designation Regulation** of the **Environmental Protection and Enhancement Act** some upstream oil and gas activities require an authorization through a notice, registration, or approval. Under **Environmental Protection and Enhancement Act’s Environmental Assessment (Mandatory and Exempted Activities) Regulation** some activities require an environmental assessment prior to being considered for an **Environmental Protection and Enhancement Act** authorization. The following are the processes followed:

Authorization: The schedules of the Activities Designation Regulation designate which activities require an authorization under the **Environmental Protection and Enhancement Act**. The authorization process follows requirements of the **Approvals and Registrations Procedure Regulation** (AR 113/93) The Authorization process is shown in Figure 7.

Environmental Assessment: Environmental Assessment is the first step in a regulatory process that:

- examines a project to determine what the environmental, social, economic and health implications may be; and
- gathers information on the project and determines specific conditions under which the project can operate.

The process is generally applied to complex, large scale activities that may have the potential to result in environmental, social, economic and health impacts.

Table 16: **Environmental Protection and Enhancement Act Approval**

<u>Environmental Protection and Enhancement Act Approval</u>	
Purpose of Authorization	<p>The purpose of an <u>Environmental Protection and Enhancement Act</u> Approval is to “support and promote the protection, enhancement and wise use of the environment...”. Schedule 1 of the Activities Designation Regulation specifies activities that require <u>Environmental Protection and Enhancement Act</u> Approvals.</p> <p>Some examples of activities designated under the <u>Activities Designation Regulation</u> of the <u>Environmental Protection and Enhancement Act</u>, as requiring an approval include: sour gas plants, wastewater management and potable water systems, brine storage ponds, hydrostatic test water releases, sulphur storage facilities, sulphur manufacturing or processing plants, syngas plants, power plants, transmission pipelines, and oil sands processing plants. General provisions of the <u>Environmental Protection and Enhancement Act</u> also apply.</p> <p>Hyperlinks:</p> <ul style="list-style-type: none">• <u>Environmental Protection and Enhancement Act:</u>• AENV <u>Environmental Protection and Enhancement Act Approval Process</u> website• <u>Environmental Protection and Enhancement Act Approvals and Registrations Procedure Regulation Applications for Sour Gas Processing Plants and Heavy Oil Processing Plants A Guide to Content</u>• <u>A Guide to Content for Industrial Approval Applications</u>

<u>Environmental Protection and Enhancement Act Approval</u>	
	<ul style="list-style-type: none"> • <u>Approvals and Registrations Procedure Regulation</u> • <u>Activities Designation Regulation</u>
Agency Responsible	Alberta Environment. Other agencies, primarily the ERCB and Sustainable Resource Development, provide specific technical advice (e.g., technical expertise on issues relating to technologies, standards, aquatic environments, fisheries, vegetation and wildlife).
Description of Authorization Process	<p>Generally, an <u>Environmental Protection and Enhancement Act</u> Approval consists of 5 stages: 1) Filing, 2) Notice Requirements, 3) Review, 4) Decision and 5) Appeal.</p> <p>Filing</p> <ul style="list-style-type: none"> • To receive an <u>Environmental Protection and Enhancement Act</u> approval, an applicant must complete and submit an application form and pay a required fee to Alberta Environment. There are <u>Environmental Protection and Enhancement Act Approvals and Registrations Procedure Regulation - Applications for Sour Gas Processing Plants and Heavy Oil Processing Plants - A Guide to Content</u> and <u>A Guide to Content for Industrial Approval Applications</u> which provides detail. • The information required in an application includes: <ul style="list-style-type: none"> ○ the location, capacity and size of the activity; ○ its nature and an account of any public (including First Nations) consultation undertaken or proposed by the applicant; ○ where National Energy Board or Natural Resources Conservation Board approval is required, need to provide proof of that approval; ○ copies of existing approvals or registrations; ○ life of the project and expected construction, operation and reclamation dates; ○ the raw materials, technologies and processes to be used; ○ the substances to be released and justification for why they need to be released; ○ any previous environmental monitoring information; ○ any anticipated impacts resulting from the activity; ○ any Emergency Response Plans required by local authorities; and ○ confirmation of contingency plans to deal with unanticipated releases. <p>The Director can waive requirements that do not apply to a proposed project. Guidelines have been developed with detailed requirements for specific kinds of activities.</p> <p>Notice</p> <ul style="list-style-type: none"> • To receive an <u>Environmental Protection and Enhancement Act</u> Approval, applicants must provide notice of application to affected stakeholders. Stakeholders can file statements of concern to the Director. • Public involvement is a key component of the approval process: the Act provides for public notification on approval applications. Anyone directly affected by an application may submit a written statement to the Director outlining concerns, and may be able to appeal a decision to issue an approval. • The Director may waive the notice requirement in an emergency; when the activity is considered routine within the meaning of the regulations, or adequate notice has already been given. <p>Review</p> <ul style="list-style-type: none"> • The review determines whether the activity's overall impact on the environment is

<i>Environmental Protection and Enhancement Act Approval</i>	
	<p>in accordance with the Act and regulations, standards, policies, etc. The review addresses elements such as design plans, site suitability, proposed monitoring programs and methods of minimizing the generation, use, release of substances, etc.</p> <ul style="list-style-type: none"> • To complete a review, the Director may request additional information and ask the applicant to hold public information meetings or address public statements of concern. <p>Decision / Appeal</p> <ul style="list-style-type: none"> • The Director decides whether an approval will be issued and under what conditions, weighing the results of any related public hearings of the ERCB, or statements of concern. • Following the Director’s decision, notice is provided to the applicant (or approval holder) and to those who filed statements of concern. • Decisions may be appealed to the Environmental Appeals Board, which is an administrative tribunal. Details regarding appeals can be found on the <u>Environmental Appeals Board</u> website <p>Certificates of qualification</p> <ul style="list-style-type: none"> • A certificate of qualification may be needed if part of the upstream oil and gas activity includes work related to potable water, wastewater and storm drainage, substance releases and pesticides. • Individuals whose work could affect the environment may be required to obtain certificates indicating their qualifications to do this type of work. <p>Security</p> <p>Financial security is required for privately owned waste management facilities with an EPEA approval.</p>
Linkages to other processes	<p>Where more than one registration and/or approval is required under <i>Environmental Protection and Enhancement Act</i>, the <i>Water Act</i>, or under other legislation administered by other provincial government agencies such as Sustainable Resource Development and the ERCB, Alberta Environment may utilize a streamlined "single window" approach in reviewing the application for approval / registration. The “single window” approach may include a one-point contact for proponents, a single form on which application can be made under multiple pieces of legislation, and a co-ordinated application review process to ensure the reviews under the various pieces of legislation and each resulting decision are coordinated and occur in a timely manner.</p>
Triggers	<p>Activities requiring approval are identified in Schedule 1 of the <i>Activities Designation Regulation</i>.</p>
Stakeholder Engagement	<ul style="list-style-type: none"> • Applicants may be required to place a public notice of the application in appropriate newspapers or to post it at specified locations. Directly affected stakeholders can submit concerns for consideration in the decision. While generally requiring public notice, this can be waived at the discretion of the Director. Please see Figure 7 for more information. • Joint notices are sometime issued under the <i>Environmental Protection and Enhancement Act</i> and <i>Water Act</i>, potentially even including the ERCB.
Contact Information	<p>For general enquiries, contact the Alberta Environment Information Centre Phone: (780) 427-2700 (toll free, dial 310-0000) Fax: (780) 422-4086 Hours of operation: Weekdays, 8:15 a.m. - 4:30 p.m.</p>

Table 17: Environmental Protection and Enhancement Act Registration

<u>Environmental Protection and Enhancement Act</u> Registration	
Purpose of Authorization	<p>The purpose of an <u>Environmental Protection and Enhancement Act</u> Registration is to “support and promote the protection, enhancement and wise use of the environment...”. Schedule 2 of the <u>Activities Designation Regulation</u> specifies activities that require <u>Environmental Protection and Enhancement Act</u> Registration. General provisions of the <u>Environmental Protection and Enhancement Act</u> also apply.</p> <p>Hyperlinks:</p> <ul style="list-style-type: none"> • <u>Environmental Protection and Enhancement Act</u> • <u>Approvals and Registrations Procedure Regulation</u> • <u>Activities Designation Regulation</u> • <u>Fact Sheet on Environmental Protection and Enhancement Act Registrations</u> • <u>Codes of Practice</u>
Agency Responsible	Alberta Environment
Description of Authorization Process	<p>Application for Registration:</p> <ul style="list-style-type: none"> • Proponent submits an application for registration to Alberta Environment. Applications include the following: <ul style="list-style-type: none"> ○ the location, capacity and size of the activity; ○ its nature and an account of any public consultation undertaken or proposed by the applicant; ○ where the National Energy Board or ERCB approval is required, need to provide proof of that approval; ○ copies of existing approvals or registrations; ○ life of the project with expected construction operation and reclamation dates; ○ the raw materials, technologies and processes to be used; ○ substances to be released and justification for why they need to be released; ○ any previous environmental monitoring information; ○ any anticipated impacts resulting from the activity; ○ information on any Emergency Response Plans required by local authorities; and ○ confirmation of contingency plans to deal with unanticipated releases. <p>Note: The Code of Practice covering a specific activity requiring registration may identify additional application information requirements. Alberta Environment’s Codes of Practice relating to <u>Environmental Protection and Enhancement Act</u> can be found on the <u>Alberta Queen’s Printer</u> website</p> <p>Application Review:</p> <ul style="list-style-type: none"> • The Director reviews the application to determine whether or not a registration should be issued. <p>Decision</p> <ul style="list-style-type: none"> • The Director decides whether to issue or refuse to issue a registration. The Director may also request additional information to support a registration application. When a registration is issued, the activity must occur in accordance with the latest version of the Code of Practice for the particular activity or as otherwise stipulated by the Director. The activity may not proceed until the registration is issued.

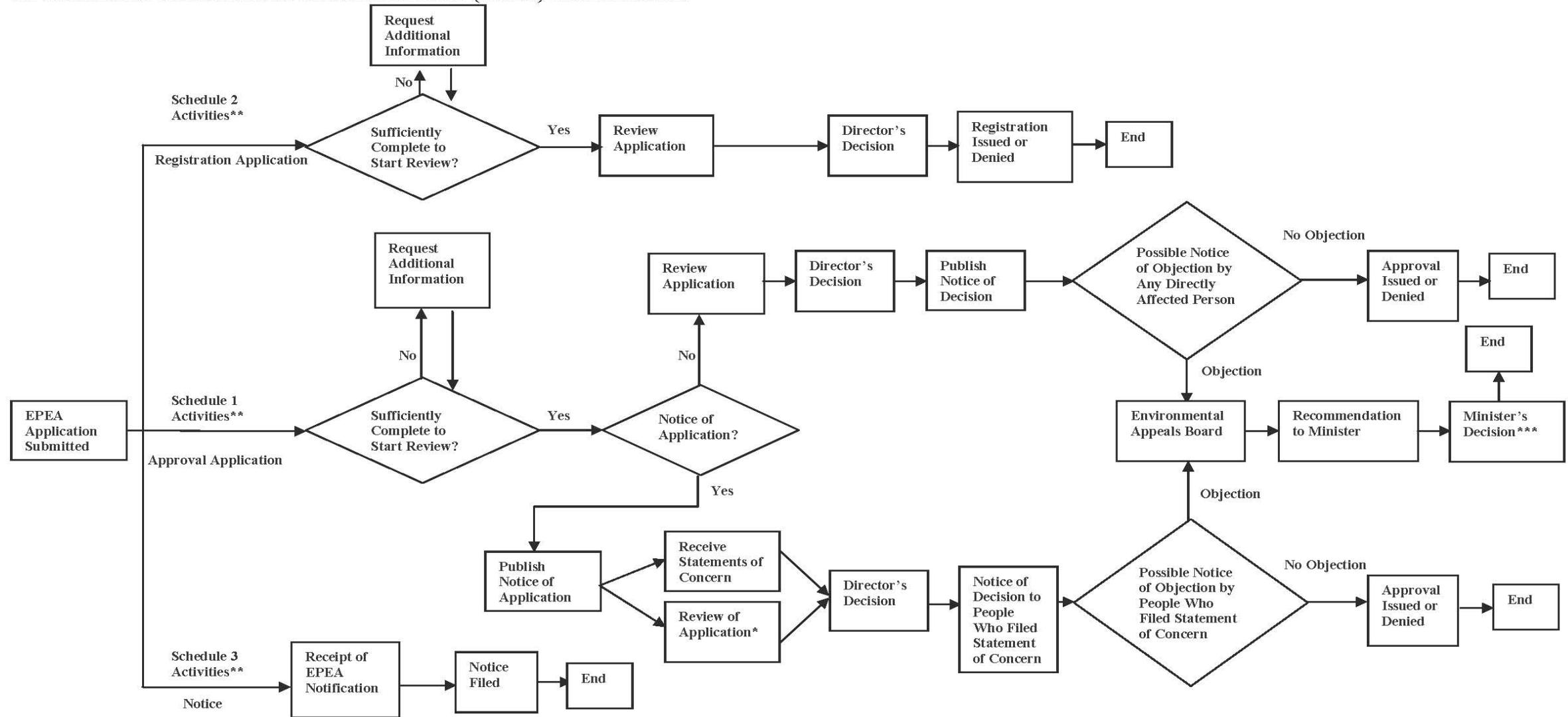
<u>Environmental Protection and Enhancement Act Registration</u>	
Linkages to other processes	Where more than one registration and / or approval is required under <u>Environmental Protection and Enhancement Act</u> , the <u>Water Act</u> , or under other legislation administered by other provincial government agencies such as Sustainable Resource Development and the ERCB, Alberta Environment may utilize a streamlined "single window" approach in reviewing the application for registration. The "single window" approach may include a one-point contact for proponents, a single form on which application can be made under multiple pieces of legislation, and a co-ordinated application review process to ensure the reviews under the various pieces of legislation and each resulting decision are coordinated and occur in a timely manner.
Triggers	Activities requiring registration under <u>Environmental Protection and Enhancement Act</u> are identified in Schedule 2 of the <u>Activities Designation Regulation</u>
Stakeholder Consultation	Stakeholder notification is not required; however it may be beneficial for the project proponent to work with stakeholders to alleviate any concerns.
Contact Information	For general enquiries, contact the Alberta Environment Information Centre Phone: (780) 427-2700 (toll free, dial 310-0000) Fax: (780) 422-4086 Hours of operation: Weekdays, 8:15 a.m. - 4:30 p.m.

Table 18: **Environmental Protection and Enhancement Act Notice**

<u>Environmental Protection and Enhancement Act Notice</u>	
Purpose of Authorization	The purpose of an <u>Environmental Protection and Enhancement Act</u> Notice is to "support and promote the protection, enhancement and wise use of the environment...". Schedule 3 of the <u>Activities Designation Regulation</u> specifies activities that require <u>Environmental Protection and Enhancement Act</u> Notice. General provisions of the <u>Environmental Protection and Enhancement Act</u> also apply. Hyperlinks: <ul style="list-style-type: none"> • <u>Environmental Protection and Enhancement Act</u> • <u>Approvals and Registrations Procedure Regulation</u> • <u>Activities Designation Regulation</u> • <u>Codes of Practice</u>
Agency Responsible	Alberta Environment receives and files the notice.
Description of Authorization Process	<ul style="list-style-type: none"> • A proponent needs to provide notice to Alberta Environment of their intent to conduct the activity within the required timeline specified in the Code of Practice. • The activity must be undertaken in accordance with the requirements of <u>Environmental Protection and Enhancement Act</u> and the associated regulations, Codes of Practice, etc.
Linkages to other processes	Not Applicable.
Triggers	The Activities Designation Regulation specifies activities that require <u>Environmental Protection and Enhancement Act</u> Notice.

<i>Environmental Protection and Enhancement Act Notice</i>	
Stakeholder Engagement	<ul style="list-style-type: none"> • Stakeholder notification is not required; however it may be beneficial for the project proponent to work with stakeholders to alleviate any concerns. • Consent however may be a requirement under a Code of Practice prior to filing a notice.
Contact Information	<p>For general enquiries, contact the Alberta Environment Information Centre Phone: (780) 427-2700 (toll free, dial 310-0000) Fax: (780) 422-4086 Hours of operation: Weekdays, 8:15 a.m. - 4:30 p.m.</p>

Figure 7: Environmental Protection and Enhancement Act (EPEA) Authorizations



Note: Environmental Appeals Board generally does not consider matters already addressed by an ERCB Hearing.

*Review of Application may include a review of the application by experts in other Departments/Agencies.

**Schedule 1, 2, and 3 refer to the different schedules of the Activities Designation Regulation.

***Minister makes decision on issuing or denying approval after recommendations are issued by the Environmental Appeals Board.

Table 19: Environmental Protection and Enhancement Act Environmental Assessment

<u>Environmental Protection and Enhancement Act</u> Environmental Assessment	
Purpose of Authorization	<p>Alberta’s Environmental Assessment Process has three basic goals.</p> <ul style="list-style-type: none"> • To gather information – the process ensures that enough information is provided by the project proponent to inform the public, government agencies and decision-makers about the proponent’s understanding of the consequences of their project. • Public involvement – the process provides an opportunity for people who may be affected by a proposed activity to express any concerns and provide advice to proponents and government agencies. • Support sustainable development – the information provided during the process allows early consideration of the project’s place in the overall plan for the province’s environment and economy. <p>Details regarding which activities may or may not require environmental impact assessments are outlined in the <u>Environmental Assessment (Mandatory and Exempted Activities) Regulation</u> Activities not covered in the Environmental Assessment (Mandatory and Exempted Activities) Regulation are discretionary. Additional details on environmental assessment may be found in the <u>Environmental Protection and Enhancement Act</u> Part 2 Division 1.</p> <p>Hyperlinks:</p> <ul style="list-style-type: none"> • <u>Environmental Protection and Enhancement Act:</u> • <u>Environmental Assessment (Mandatory and Exempted Activities) Regulation</u> • <u>Alberta Environment web page on Environmental Impact Assessment</u>
Agency Responsible	<p>Alberta Environment directs and manages the process under Part 2, Division 1 of the <u>Environmental Protection and Enhancement Act.</u></p>
Description of Authorization Process	<p>Key stages in the process:</p> <ul style="list-style-type: none"> • <u>Determination of whether or not an Environmental Impact Assessment is required:</u> typically a proponent, other government department, local authority or other person informs Alberta Environment about a proposed project that may require an Environmental Impact Assessment. Alberta Environment staff review the project to determine if an Environmental Impact Assessment report will be required based on the <i>Environmental Assessment (Mandatory and Exempted Activities) Regulation</i>. In cases where it is to the discretion of Alberta Environment as to whether or not an activity may require an Environmental Impact Assessment, Alberta Environment may request that a screening report be prepared and comments solicited from the public. • <u>Preparation of an Environmental Impact Assessment:</u> Proponent is first required to prepare a Proposed Terms of Reference and must provide it to the public and Alberta Environment for review. The Final Terms of Reference which will set the scope for the Environmental Impact Assessment is determined by Alberta Environment in consultation with the public. Proponents are then required to complete and submit the Environmental Impact Assessment report to Alberta Environment. For most large upstream oil and gas development projects, the Environmental Impact Assessment report is also part of the application submitted to the ERCB. • <u>Technical Review:</u> Once submitted to the government, the Environmental Impact Assessment report is reviewed by Alberta Environment and other provincial agencies through a multi-disciplinary integrated team of experts from various government

Environmental Protection and Enhancement Act Environmental Assessment	
	<p>departments and agencies. The make-up of this team is based upon the nature and location of the project. Once the review team is satisfied that the Environmental Impact Assessment report is complete and effectively presents the potential effects and mitigation the report is then deemed complete and is formally referred to Alberta Environment and/or other relevant government agencies and jurisdictions for decisions.</p> <ul style="list-style-type: none"> • <u>Public Interest Decision and Regulatory Approvals</u>: Once the project has been through Environmental Assessment it proceeds to the relevant regulatory approval processes.
Linkages to other processes	<ul style="list-style-type: none"> • When an Environmental Impact Assessment Report is required, it forms part of the application submitted to the ERCB. • Other provincial departments such as Sustainable Resource Development, Transportation, Health and Wellness, and Culture and Community Spirit are also involved in the technical review of the Environmental Impact Assessment report. The federal departments may also be involved in the provincial environmental assessment process through the Canada-Alberta Agreement on Environmental Assessment Cooperation
Triggers	<p>For environmental assessment, all activities will fall under one of the following categories:</p> <ul style="list-style-type: none"> • <u>Mandatory Activity</u>: is a proposed activity listed in Schedule 1 of the <u>Environmental Assessment (Mandatory and Exempted Activities) Regulation (111/93)</u> Activities listed in this Schedule require the preparation of an EIA report. Activities requiring an Environmental Assessment include: <ul style="list-style-type: none"> • heavy oil processing plants of greater than 2,000 m3 output per day; • sour gas processing plant that emits more than 2.8 tonnes of sulphur per day; and • <u>Exempted Activity</u>: is a proposed activity that is listed in Schedule 2 of the Environmental Assessment (Mandatory and Exempted Activities) Regulation (111/93). Activities listed in this Schedule do not require the preparation of an EIA report, however the Minister does have the authority to require Proponents to prepare an EIA report even if the activity is listed in Schedule 2. • <u>Discretionary Activity</u>: is a proposed activity that is not listed in the Environmental Assessment (Mandatory and Exempted Activities) Regulation (111/93). The term discretionary is used because the Director has the discretion to require an EIA for the activity. <p>The Environmental Assessment process may be triggered for discretionary activities through four mechanisms:</p> <ol style="list-style-type: none"> 1. Another Alberta Environment Director, usually the Approvals Director, refers the project to the Environmental Assessment Director for consideration; 2. The Proponent requests the Environmental Assessment Director make a decision on the need for an EIA report; or 3. The Environmental Assessment Director decides that an EIA report may be required. 4. The Minister may order an EIA report be prepared. <p>Upon review of the project information provided the Director may decide that:</p> <ol style="list-style-type: none"> 1. An EIA report is not required, and the Proponent can apply for any approvals that may be required from Alberta Environment, or 2. More information is needed to determine if an EIA report is required through the

Environmental Protection and Enhancement Act Environmental Assessment	
	<p>preparation of a Screening Report.</p> <p>To prepare a Screening Report, the Director requires the Proponent to prepare a Disclosure Document, and seeks comments from the public and from other government agencies on the merits of the project and the need for an EIA report. The minimum period for public comment is 30 days. The Screening Report considers the complexity of the project, the nature of technology involved, the sensitivity of the location, the presence of other similar activities, public interest and any other factors the Director considers significant. When completed, the Screening Report is made available to the public and the Director advises the Proponent whether an EIA report is required.</p>
Stakeholder Consultation	<p>Public notification, stakeholder consultation and identifying and addressing stakeholder concerns are integral aspects of the Environmental Impact Assessment process. All stakeholders have the ability to provide input on the proposed Terms of Reference for the Environmental Impact Assessment Report.</p>
Contact Information	<p>Questions about the EA process should be directed to:</p> <p>Environmental Assessment Team Alberta Environment 111 Twin Atria 4999 – 98 Avenue Edmonton, Alberta T6B 2X3 Phone: (780) 427-5828 Fax: (780) 427-9102 Email: environmental.assessment@gov.ab.ca Website: www.environment.alberta.ca/1274.html</p>

Table 20: Environmental Protection and Enhancement Act Remediation Certificates

<u>Environmental Protection and Enhancement Act</u> Remediation Certificate	
Purpose of Authorization	<p>Remediation certificates provide an incentive to clean up contaminated sites by providing closure of regulatory liability against changing remediation standards. Remediation certificates recognize remediation projects that have achieved Alberta Environment's environmental protection objectives.</p> <p>Currently, only remediated areas of petroleum storage tank sites are eligible for certification. Future stages of the program will include other types of remediated sites.</p>
Agency Responsible	Alberta Environment is responsible for remediation certificates.
Description of Authorization Process	<ul style="list-style-type: none"> • Site owners or developers that would like to receive a remediation certificate must submit a completed Remediation Certificate Application Form and an application fee of \$1000. The form must be signed by the applicant and by a member of a Professional Regulatory Organization. • Applicants that meet the program requirements and apply with the required information and fee will receive a certificate acknowledging that the remediated area has met Alberta's remediation guidelines. A remediation certificate provides assurance that additional remediation is not required if guidelines are amended or updated. • The remediation certificate and supporting documentation are publically available so that interested parties can determine if a certificate has been issued for an area and review the application materials. • Alberta Environment audits approximately 10 per cent of certified areas. Alberta Environment can refuse to issue a remediation certificate for a site if the information requirements are not met or the remediated area does not meet Alberta's remediation guidelines. A remediation certificate can be cancelled if the remediated area fails an audit or there is a substantiated complaint. <p>Additional information on the following can be found here</p> <ul style="list-style-type: none"> • Remediation Certificate Application Form • Remediation Certificate Application Guide • Third Party Risk Management Plan Agreement • Environmental Site Assessment Checklist • Remediation Certificate - Fact Sheet • Alberta's Tier 1 and Tier 2 remediation guidelines • Professional Competencies for Remediation and Reclamation • Remediation Certificate Regulation
Linkages to other processes	Not applicable
Triggers	Participation in the remediation certificate program is voluntary.
Stakeholder Consultation	Stakeholder notification is not required; however it may be beneficial for the project proponent to work with stakeholders to alleviate any concerns.
Contact Information	For general enquiries, contact the Alberta Environment Information Centre Phone: (780) 427-2700 (toll free, dial 310-0000) Fax: (780) 422-4086 Hours of operation: Weekdays, 8:15 a.m. - 4:30 p.m.

Table 21: Environmental Protection and Enhancement Act Reclamation Certificates

<u>Environmental Protection and Enhancement Act</u> Reclamation Certificate	
Purpose of Authorization	This program is designed to ensure that land used for specified industrial disturbances (specified land) in Alberta is restored to a productive state. Operators must meet the requirements of the <u>Environmental Protection and Enhancement Act</u> and the <u>Conservation and Reclamation Regulation</u> . An <u>Environmental Protection and Enhancement Act</u> Reclamation Certificate is required for industrial activities on “specified lands” as set out in the Conservation and Reclamation Regulation. A reclamation certificate is required prior to terminating a surface lease.
Agency Responsible	Reclamation certificates are administered by Alberta Environment for private land, and Sustainable Resource Development for Alberta’s public land.
Description of Authorization Process	<p>Alberta Environment is responsible for reclamation of private land, while Sustainable Resource Development is responsible for reclamation of public land. Proponents must apply to Alberta Environment on private land and Sustainable Resource Development on public land.</p> <p>Alberta Environment and Sustainable Resource Development accept applications for reclamation certificates. Each application must include an analysis of contamination, a report detailing how contaminants were remediated and how surface issues such as soil replacement and re-vegetation were addressed.</p> <p>Alberta Environment and Sustainable Resource Development conduct audits through field inspections at approximately 15 per cent of the sites that receive a reclamation certificate to ensure that all standards and guidelines have been met. Reclamation certificates can be cancelled at audited sites or following a landowner/occupant complaint, if the site does not meet the remediation requirements or reclamation criteria.</p> <p>Under this reclamation and remediation program, industry has a 25-year liability for surface reclamation issues (topography, vegetation, soil texture, drainage, etc.) and a lifetime liability for contamination.</p> <p>Industry is required to provide landowners/occupants with copies of all reclamation and remediation information. A form is available to help landowners or occupants with filing a complaint, which can be filed at any time during construction, operation, reclamation, or following reclamation of a site. All complaints are investigated. Substantiated complaints may lead to cancellation of a reclamation certificate.</p> <p>Additional information on the following can be found here</p> <ul style="list-style-type: none"> Program description Application process Updates to the program Frequently asked questions Professional Sign Off for Upstream Oil and Gas Reclamation Certificate Work Reclamation Criteria Wellsite Reclamation Certification Application Process

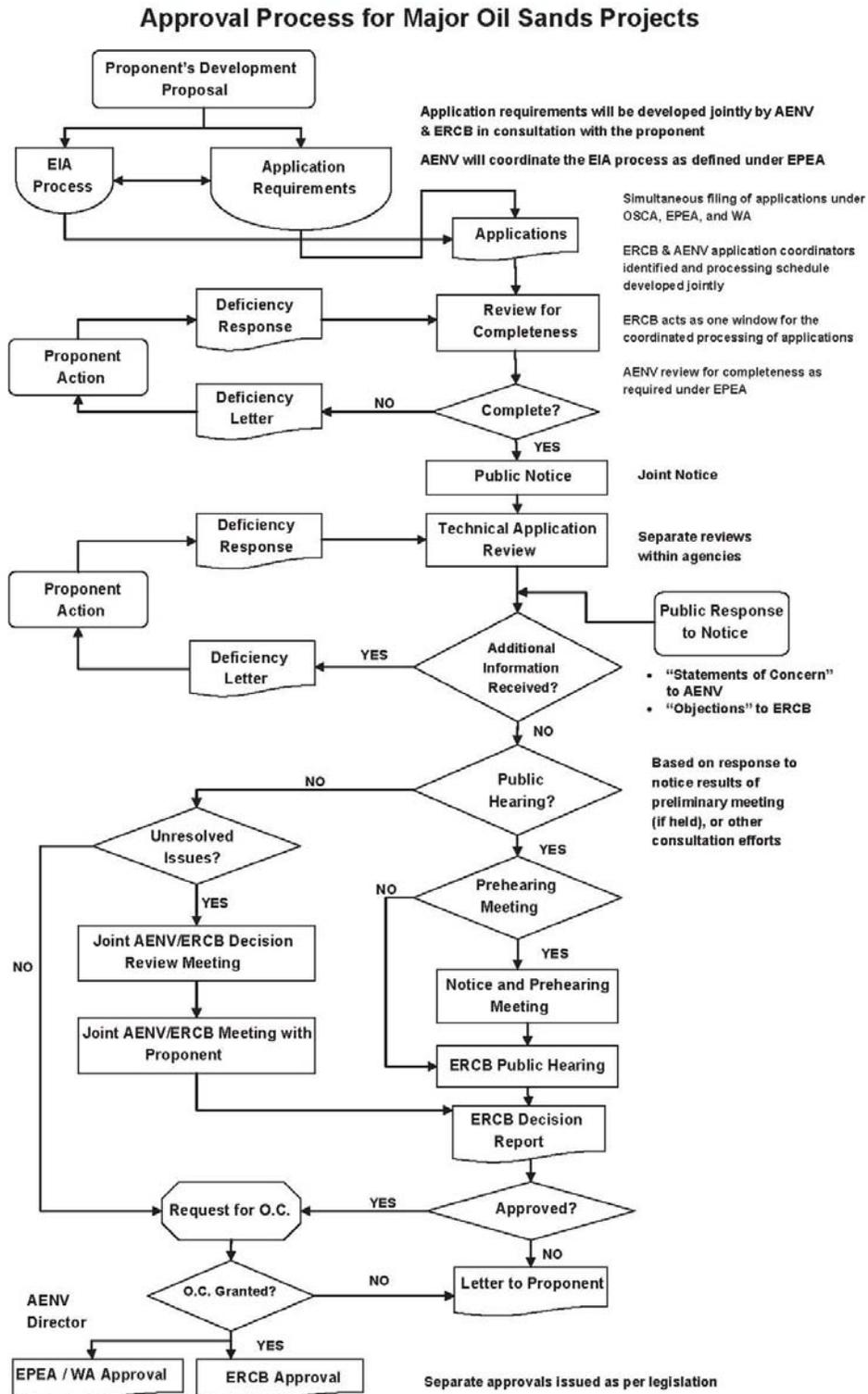
<i>Environmental Protection and Enhancement Act</i> Reclamation Certificate	
Linkages to other processes	Alberta Environment works with Sustainable Resource Development and municipalities to ensure land used for specified industrial activities ("specified land") is reclaimed.
Triggers	An <i>Environmental Protection and Enhancement Act</i> Reclamation Certificate is required for industrial activities on "specified lands." A reclamation certificate is required prior to terminating a surface lease.
Stakeholder Consultation	Industry is required to provide landowners/occupants with copies of all reclamation and remediation information. Landowners can lodge complaints and can also appeal issuance of a reclamation certificate.
Contact Information	For general enquiries, contact the Alberta Environment Information Centre Phone: (780) 427-2700 (toll free, dial 310-0000) Fax: (780) 422-4086 Hours of operation: Weekdays, 8:15 a.m. - 4:30 p.m.

Table 22: In situ Recovery Scheme

Table 22: In situ Recovery Scheme	
Purpose of Authorization	Commercial in situ oil sands projects that recover oil sands, crude bitumen, or products derived therefrom require an approval under the <i>Oil Sands Conservation Act</i> through ERCB <i>Directive 023: Guidelines Respecting an Application for a Commercial Crude Bitumen Recovery and Upgrading Project</i> to construct and operate a scheme for the recovery of crude bitumen. A project can be a one-well scheme. Hyperlinks: <ul style="list-style-type: none"> • <i>Oil Sands Conservation Act</i> and <i>Regulations</i> • ERCB <i>Directive 023: Guidelines Respecting an Application for a Commercial Crude Bitumen Recovery and Upgrading Project</i>
Agency Responsible	The ERCB has primary decision making authority regarding the determination of whether a project is in the public interest. Alberta Environment <i>Environmental Protection and Enhancement Act</i> and <i>Water Act</i> authorizations and Sustainable Resource Development <i>Public Lands Act</i> authorizations follow approval of a project by the ERCB.
Description of Authorization Process	The authorization process covers in situ oil sands projects regulated under the <i>Oil Sands Conservation Act</i> and has links to key technical requirements. The in-situ scheme application process provides for information submissions, technical review, stakeholder notification and consultation, and adjudication (including a hearing if necessary). Key aspects of the approval process: <ul style="list-style-type: none"> • Applications must contain information regarding the project including: <ul style="list-style-type: none"> ○ notification of and consultation with stakeholders ○ resource recovery plans (e.g., recovery technology, resource delineation); ○ the layout of the surface facilities and well pads; and ○ an assessment of the social, economic and environmental effects of the project.

	<ul style="list-style-type: none"> • If a project is approved, companies must apply for facility, pipeline, and well licences under ERCB <u>Directive 056: Energy Development Applications and Schedules</u>. • Since objections and technical matters are generally addressed in the <u>Directive 023</u> application process, the <u>Directive 056</u> application process is typically routine.
Linkages to other processes or Agencies	<ul style="list-style-type: none"> • Environmental and social impact assessments for in situ schemes, where required by the <u>Environmental Protection and Enhancement Act</u>, must be submitted with the application to both Alberta Environment and the ERCB. The ERCB decisions typically precede AENV issuance of AEPEA authorizations where an EIA is involved. • Alberta Environment <u>Environmental Protection and Enhancement Act</u> and <u>Water Act</u> authorizations and Sustainable Resource Development <u>Public Lands Act</u> authorizations generally follow approval of a project by the ERCB. • Individual activities within the scheme must also subsequently obtain a well, pipeline or facilities authorization (ERCB <u>Directive 056</u>).
Stakeholder Consultation:	<ul style="list-style-type: none"> • Applicants must notify affected stakeholders and consult with them as part of the application process. • If an applicant is unable to resolve stakeholder objections regarding a project, parties are encouraged to attempt appropriate dispute resolution. If objections remain, a determination is made on relevance and standing and the matter may be set down for a hearing or the objections are set aside. The hearing decision may deny, approve or approve with conditions.
Contact Information	For ERCB information, contact the ERCB Customer Contact Centre at 403-297-8311 (press '0') or e-mail Inquiries@ercb.ca

Figure 9: Approval Process for Major Oil Sands Projects



Note: Figure 9 pertains to in-situ oil sands projects.

Table 23: Energy Development Licences (wells, pipelines and facilities)

Table 23: Energy Development Licences (wells, pipelines and facilities)	
Purpose of Authorization	<p>Under the ERCB <u>Directive 056: Energy Development Applications and Schedules</u> any petroleum industry development that includes wells, pipelines or other structures (i.e. compressor stations, batteries, satellites and plants) requires a licence from the ERCB to construct and operate. The ERCB’s requirements are primarily intended to ensure environmental protection, public safety, resource management, compliance assurance and that potentially affected stakeholders’ issues have been examined.</p> <p>Authorizations form the basis of the primary record of information about oil and gas activity in the province. Further, the process forms the basis for future compliance enforcement and liability management.</p> <p>Directive 056 is incorporated by reference into the <i>Oil and Gas Conservation Regulations</i> and serves as an extensive reference document about the rules that govern energy development in Alberta.</p> <p>Hyperlinks:</p> <ul style="list-style-type: none"> • <u>Directive 056: Energy Development Applications and Schedules</u> (references extensive list of applicable other policy instruments) • <u>Oil and Gas Conservation Regulations</u>
Agency Responsible	The process is directed and managed by the ERCB with limited formal involvement from Alberta Environment, Sustainable Resource Development, and Alberta Energy.
Description of Authorization Process	<p>Key aspects of the approval process include:</p> <ul style="list-style-type: none"> • Notification of and consultation with stakeholders; confirmation that technical requirements have been met and a primary, permanent record of the specifics of the energy project that can be expanded upon over time. • A review process that directs applications down either routine or non-routine pathways. There are three types of non-routine applications: Non-routine—Participant Involvement; Non-routine—Technical; Non-routine—ERCB Designated. Read <u>Directive 056</u> for descriptions. <p>Directive 056 includes information and links to technical/compliance standards and requirements and has detailed procedural requirements. The Electronic Application System is able to accept applications for wells and surface facilities, and in the future, pipeline applications. Pipeline applications cannot be submitted through Electronic Application System at this time and must be submitted on paper.</p>
Stakeholder Consultation	Prior to applying, the applicant must develop an effective participant involvement program that includes parties whose rights may be directly and adversely affected by the nature and extent of the proposed application. Where stakeholder concerns (i.e., objections) are unable to be resolved by the proponent, the ERCB provides access to an Appropriate Dispute Resolution

Table 23: Energy Development Licences (wells, pipelines and facilities)	
	process (ERCB <u>IL 2001-01: Appropriate Dispute Resolution (ADR) Program and Guidelines for Energy Industry Disputes</u>) If warranted, the ERCB can also choose to call a hearing.
Linkages to other processes and Agencies	<ul style="list-style-type: none"> • Before applying to the ERCB for a facility or pipeline license on public lands, a proponent must have a mineral surface lease (MSL), or pipeline lease agreement (PLA) application number respectively, from Sustainable Resource Development. • Environmental and social impact assessments for major projects, where required by the <u>Environmental Protection and Enhancement Act</u> (e.g., major sulphur recovery sour gas processing plant), must be submitted with the application to both Alberta Environment and the ERCB. The ERCB decisions typically precede AENV issuance of <i>EPEA</i> authorizations where an EIA is involved. • These are independent processes; however, issues affecting <i>EPEA</i> and <u>Water Act</u> decisions may be tested at an ERCB hearing. • If landholder (occupant) consent for land access has not been obtained, the Surface Rights Board will resolve issues of access and compensation.
Contact Information	Questions regarding Directive 056 may be directed to the Directive 56 help line at 403-297-4369 or Directive <u>Directive56.help@ercb.ca</u> .

Figure 10: Energy Development Applications Participant Involvement Process

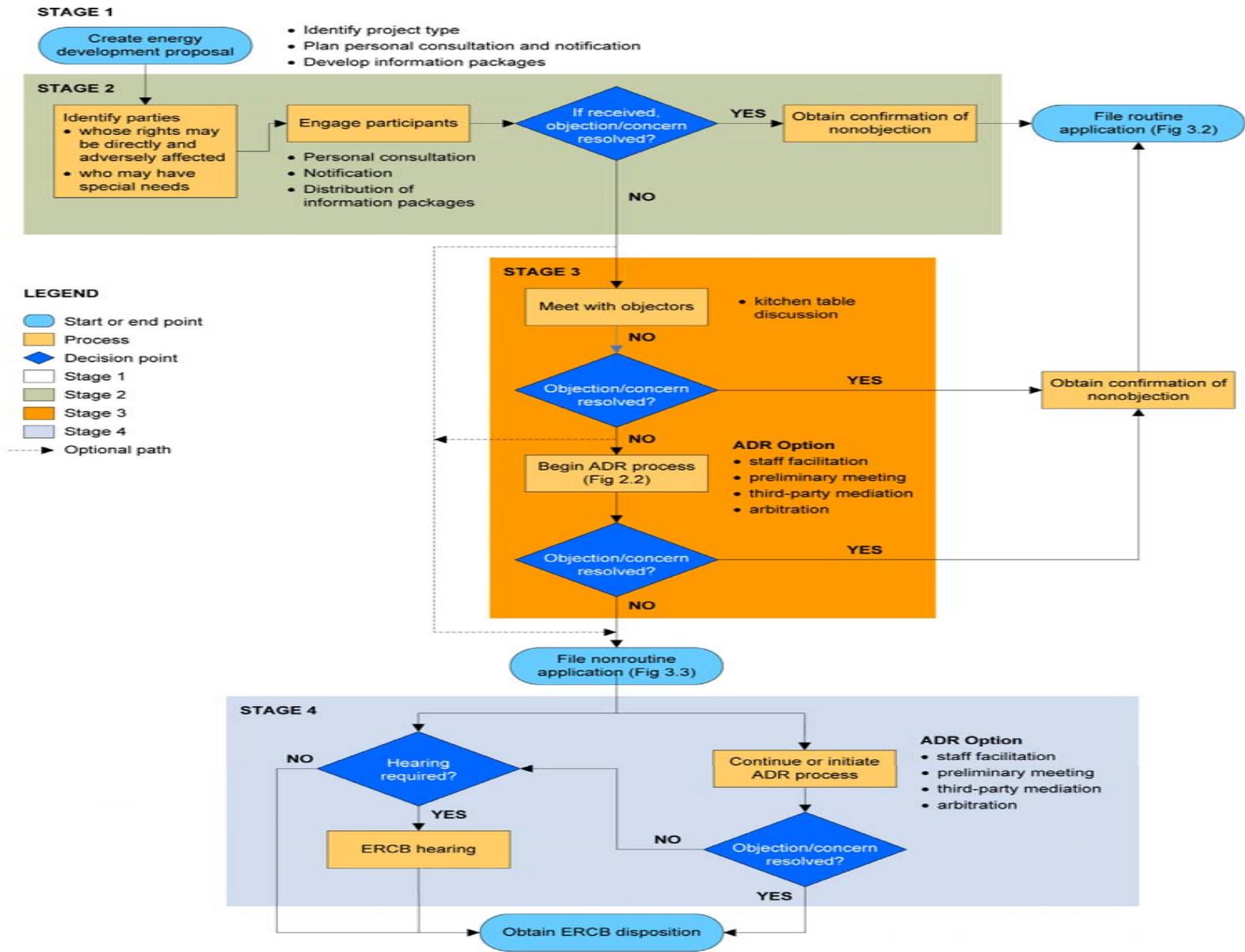
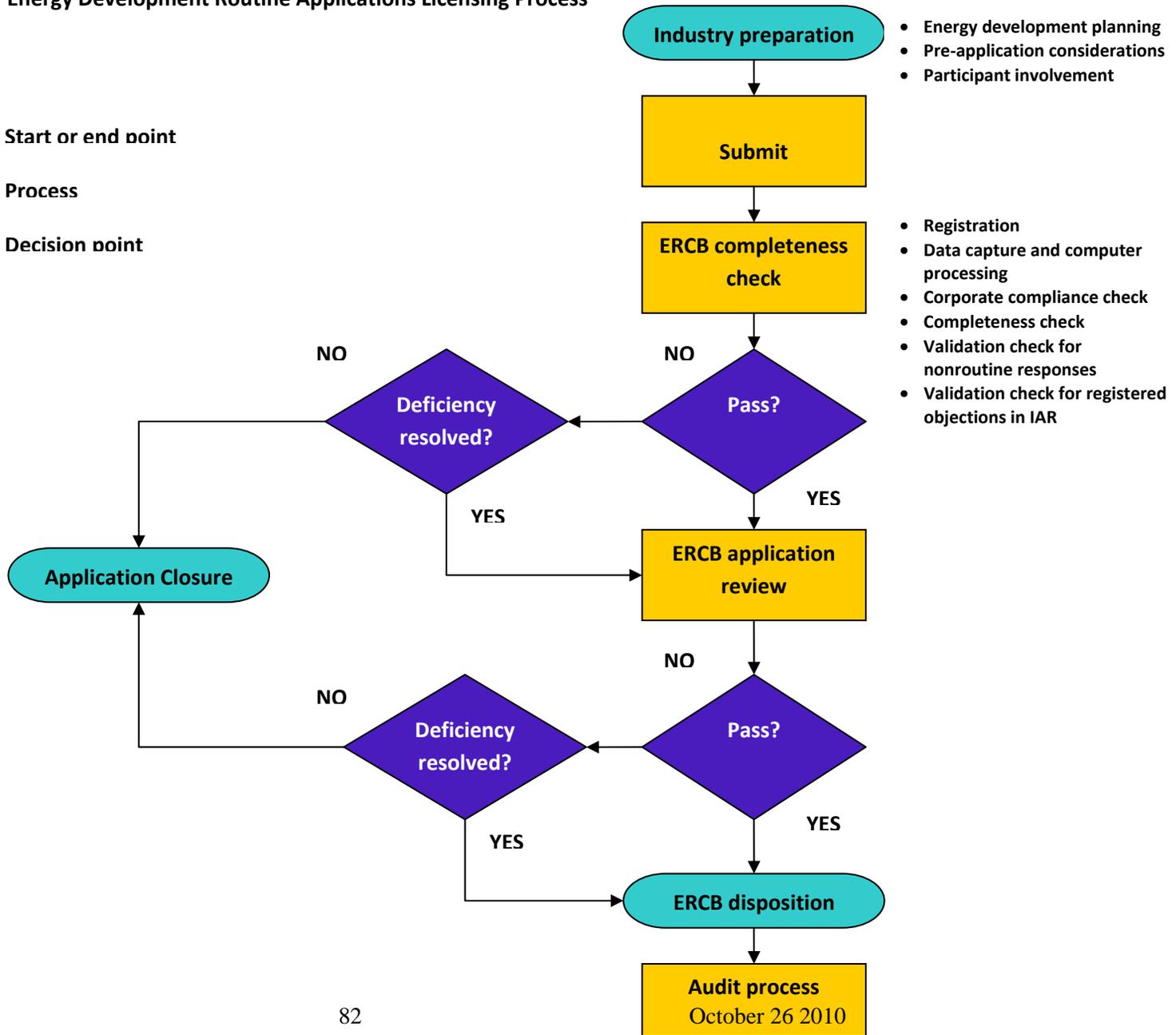


Figure 11: Energy Development Routine Applications Licensing Process

LEGEND

-  Start or end point
-  Process
-  Decision point



- Energy development planning
- Pre-application considerations
- Participant involvement

- Registration
- Data capture and computer processing
- Corporate compliance check
- Completeness check
- Validation check for nonroutine responses
- Validation check for registered objections in IAR

Figure 12: Energy Development Non-routine Applications Licensing Process

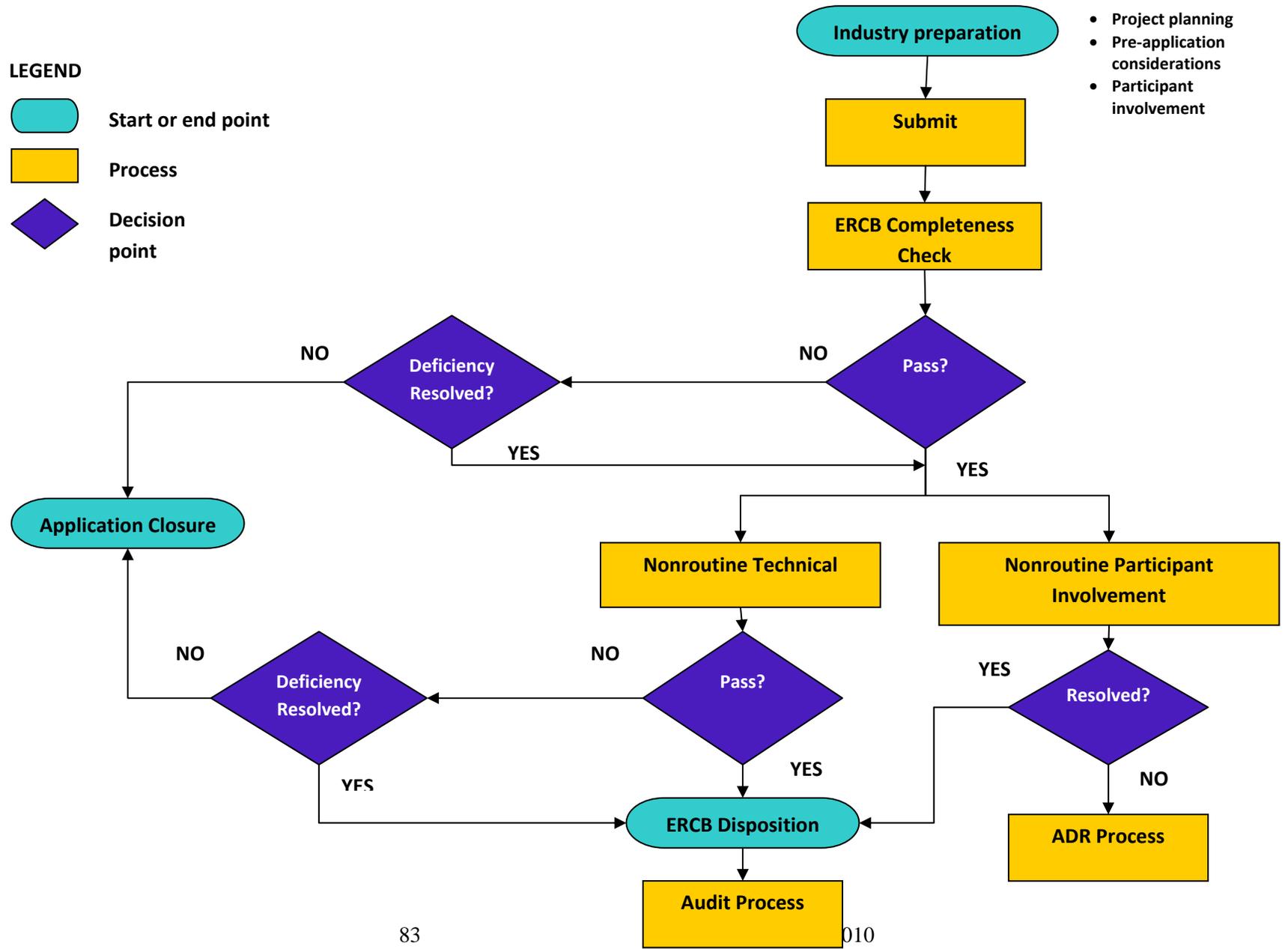


Table 24: Resource or Pool Development

Table 24: Resource or Pool Development	
Purpose of Authorization	<p>Based on ERCB <u>Directive 065: Resources Applications for Conventional Oil and Gas Reservoirs</u> resource authorizations deal with sub-surface oil and gas issues such as:</p> <ul style="list-style-type: none"> • maximizing conservation of the resource; • disputes resulting from competitive operations in a common reservoir, • limited opportunities to produce or access constraints to established facilities; and • safety and environmental concerns regarding subsurface development. <p>Hyperlinks:</p> <ul style="list-style-type: none"> • <u>Directive 065: Resources Applications for Conventional Oil and Gas Reservoirs</u>
Agency Responsible	The process is directed and managed by the ERCB. Depending on the type of application, other agencies may be involved.
Description of Authorization Process	<p>Directive 065 describes the process to apply to the ERCB for all necessary approvals to establish the strategy and plan to deplete a pool or portion of a pool using one resource application.</p> <p>Specific resource applications are required to allow the ERCB and potentially affected parties, often with competing interests, to understand and test the appropriateness or impact of depletion plans at critical milestones. Other resource applications may address revisions to the baseline set of depletion or equity rules and reservoir descriptions. Finally, some resource applications address known equity disputes arising from different ownership, limited opportunity to produce, or access constraints to established facilities. If such issues are not resolved, these applications go directly to a hearing.</p> <p>The resources applications for which this directive applies are divided into units as follows:</p> <ul style="list-style-type: none"> • Equity: rateable take, common purchaser, common carrier, common processor, and compulsory pooling • Conservation: enhanced recovery scheme (gas cycling, water-flood, immiscible gas flood, miscible flood), concurrent production, and pool delineation and ultimate reserves • Production Control: commingled production, good production practice (primary depletion pools), gas-oil ratio penalty relief, special maximum rate limitation, and gas allowable • Disposal/Storage: disposal (water and waste), acid gas disposal, and underground gas storage. Note: The technical requirements for the wellbore of injection and disposal wells are provided in <u>Directive 051: Injection and Disposal Wells – well classifications, completions, logging, and testing requirements</u> • Corporate Changes: change in name of the holder of an ERCB approval and change in holder of an ERCB approval • Gas and Ethane Removal: short and long-term natural gas removal, short-term ethane removal. • Special Well Spacing: holdings, reduced drilling spacing units, change in target area, rescinding a holding, and change in approval holder.

Table 24: Resource or Pool Development	
Description of Authorization Process	<p>This Directive includes Schedule 1: Resources Applications registration form, guidelines on notification requirements, and seven units that address detailed information requirements for specific regulatory topics, as well as appendices giving reference sources and other support information. All applications submitted in accordance with Directive 065 must be submitted electronically via the ERCB web site.</p> <p>Key application requirements may include:</p> <ul style="list-style-type: none"> • Notification of and consultation with stakeholders; • Long-term depletion planning • Geology and reservoir engineering support data • Environment and/or safety assurance. • The review process is as follows: <ul style="list-style-type: none"> ○ Confirmation that submission requirements have been met. ○ Review of pertinent reservoir engineering and geological assessments plus environmental and safety considerations, ○ Management of all objections to the application. ○ Determination of a recommendation and any conditions of approval such as monitoring.
Stakeholder Consultation	<ul style="list-style-type: none"> • Stakeholder notification varies depending on the application type. • Minimum notification requirements for specific types of resources applications are included in Directive 065.
Linkages to other processes	ERCB Directive 051: Injection and Disposal Wells - Well Classifications Completion, Logging and Testing Requirements outlines the requirements in place to ensure wellbore integrity during injection or disposal operations.
Contact Information	Contact ERCB Resources applications staff via Customer Contact Centre at (403) 297-8311 (press '0') or e-mail Inquiries@ercb.ca .

Table 25: Emergency Response Authorization

Table 25: Emergency Response Authorization	
Purpose of Authorization	<p>Licenseses have a responsibility to ensure that they are fully prepared and capable of responding to any level of emergency. Emergency preparedness and response includes all activities done prior to an emergency so that designated personnel are ready and able to respond quickly and appropriately to an emergency incident.</p> <p>An Emergency Response Plan is required when a well, pipeline, or facility contains a hazardous product such as sour gas.</p> <p>Hyperlinks:</p> <ul style="list-style-type: none"> • ERCB <u>Directive 71: Emergency Preparedness and Response Requirements for the Petroleum Industry</u>
Agency Responsible	The ERCB manages the process and makes all decisions.

Table 25: Emergency Response Authorization	
Description of Authorization Process	<ul style="list-style-type: none"> • An Emergency Response Plan is a comprehensive plan to protect the public that includes criteria for assessing an emergency situation and procedures for mobilizing response personnel and agencies and for establishing communication and coordination among the parties. • It is a key component of emergency preparedness and response. • The type and amount of information contained within an Emergency Response Plan is determined by the potential hazard(s) identified. An Emergency Response Plan addresses emergency scenarios, potential hazards to the public, and systems required for effective response. • Licensees are required to use the application form found in Appendix 2, of Directive 071, to apply for approval of an Emergency Response Plan. Responses to questions on the form will determine whether the application is considered routine or non-routine. • Applications may be audited and if found to be noncompliant, the applicant will be subject to enforcement action. • Note: Site-specific Emergency Response Plans are not required for every drilling, production, or pipeline operation in the province. When a site-specific Emergency Response Plan is not required, a corporate-level Emergency Response Plan is used by the licensee to handle emergency events. Specific requirements for corporate-level Emergency Response Plans are found in section 2 of Directive 071. Corporate-level Emergency Response Plans do not require an ERCB approval but are still a requirement.
Stakeholder Consultation:	<p>Notification of and consultation with members of the public and local authorities within the Emergency Planning Zone is required prior to submitting an application to the ERCB when:</p> <ul style="list-style-type: none"> • developing a sour well site-specific drilling and/or completion Emergency Response Plan • developing a sour operations Emergency Response Plan; and • developing an Emergency Response Plan for high vapour pressure product pipeline and cavern storage facilities <p>For more specific information relating to the public involvement program for emergency response and preparedness please refer to Section 4 of Directive 071.</p> <p>Note: First Nations reserves and Métis settlements within the Emergency Planning Zone are considered to be local authorities and are required to be notified and consulted as a local authority.</p>
Linkages to other processes or Agencies	<p>This is a pre-qualification authorization. Therefore, prior to being able to qualify for a Business Associate Code to hold facility, well or pipeline licences (under Directive 056), regulated parties are required under Directive 071 to have an up to date Corporate Emergency Response Plan in place. Additionally, regulated parties may be required to develop a site-specific Emergency Response Plan prior to commencing operations if the facility qualifies for this requirement.</p>
Contact Information	<p>Questions should be directed to the Emergency Planning and Assessment (EPA) Helpline at 403-297-2625 or submitted by e-mail to EPAssessment@ercb.ca.</p>

Table 26: Flare Permits

Table 26: Flare Permits	
Purpose of Authorization	<p>The ERCB has a number of requirements governing the flaring and venting of petroleum products. In regulating these two aspects of oil and gas activity, the ERCB has two primary goals:</p> <ol style="list-style-type: none"> 1) to ensure the protection of public safety and the environment and to minimize any impacts to the public or the environment that may arise as a result of the flaring or venting of petroleum products; and 2) to ensure that the economic value of petroleum resources is protected <p>There are specific limits and targets for the amount of gas that can be flared or vented in routine or non-emergency situations. There are also specific economic valuation criteria outlining requirements for solution gas conservation</p> <p>Hyperlink:</p> <ul style="list-style-type: none"> • ERCB <u>Directive 060: Upstream Petroleum Industry Flaring, Incinerating, and Venting</u>
Agency Responsible	The process is directed and managed by the ERCB.
Description of Authorization Process	<p>There are two types of flaring/incinerating approvals:</p> <ul style="list-style-type: none"> • Temporary Flaring/Incinerating Approvals • Flaring and Incinerating approvals for in excess of tier volume allowances (Excess Volume Approvals) Note: Underbalanced drilling could be one of the reasons an excess volume approval is issued. <p>Approvals/authorizations to flare/incinerate are required in some, but not all, cases. There are specific limits and targets for the amount of gas that can be flared or vented in routine or non-emergent situations. Specific volume allowance thresholds determine under which circumstances temporary approval would be required. Please see ERCB <u>Directive 060</u> for conditions that do not require a temporary flaring/incinerating approval.</p> <p>Note: Planned non-routine flaring and incinerating events (e.g., maintenance blowdowns, pipeline depressuring, turnarounds) do require a temporary flaring or incinerating approval whereas, unplanned non-routine flaring and incinerating (e.g., process upsets, emergencies) do NOT require a temporary approval.</p> <p>Requests for temporary flaring approvals must be submitted to the ERCB Technical Operations Group and must include complete information on the proposed activity. Please see Temporary and Well Test Flaring and Incinerating Requirements in Directive 060 for more information. Key requirements include:</p> <ul style="list-style-type: none"> • apply for an approval to flare and/or incinerate gas • measure and report on all flared and incinerated gas • where possible (and within specified target limits) conserve solution gas • notify prior to a flaring or incinerating event; consent not required

Table 26: Flare Permits	
	<p>Requested volumes, rates, and/or conditions may not be granted by the ERCB Technical Operations Group. Consideration will be given to total volumes, total sulphur emissions, local land uses, proximity of residences, and potential for exceedance of the <u>Alberta Ambient Air Quality Objectives</u> before an approval is granted.</p> <p>Continuous solution gas flares, incinerators, or vents are addressed by ERCB <u>Directive 056</u> and do not require flare permits under <u>Directive 60</u>.</p>
Stakeholder Consultation	Directive 060 outlines the temporary flaring, venting and notification requirements
Linkages to other processes or Agencies	<p><u>Environmental Protection and Enhancement Act</u> approvals can contain conditions related to flares, such as minimum heat content and operating parameters.</p> <p>The <u>Forest and Prairie Protection Act</u> and Regulations also applies.</p>
Contact Information	Contact ERCB Technical Operations Group via Customer Contact Centre at (403) 297-8311.

Table 27: Injection & Disposal Wells – Wellbore Requirements

Table 27: Injection & Disposal Wells – Wellbore Requirements	
Purpose of Authorization	<p>ERCB <u>Directive 051: Injection and Disposal Wells - Well Classifications Completion, Logging and Testing Requirements</u> outlines the requirements in place to ensure wellbore integrity during injection or disposal operations. The directive sets the criteria for classifying the type of injection wells based on the fluid injected. Injection and disposal wells are classified to identify those wells that require increased levels of monitoring and surveillance based on the type of fluids injected.</p> <p>Wells proposed to be used for injection purposes (enhanced recovery or disposal) must meet the wellbore requirements of <u>Directive 051</u> prior to the commencement of injection.</p> <p>Hyperlinks:</p> <ul style="list-style-type: none"> • <u>Oil and Gas Conservation Act (Section 39)</u> • <u>Directive 051: Injection and Disposal Wells - Well Classifications Completion, Logging, and Testing Requirements</u> • ERCB <u>Directive 065: Resources Applications for Conventional Oil and Gas Reservoirs</u> • <u>Oil and Gas Conservation Regulations</u> • <u>Oil Sands Conservation Act</u>
Agency Responsible	<p>ERCB</p> <p>Note: Ministerial approval from the Ministry of the Environment is required for wells injecting industrial fluids. Currently, only Class 1a wells required referral to AENV.</p>

Table 27: Injection & Disposal Wells – Wellbore Requirements	
Description of Authorization Process	<p>Directive 051 wellbore requirements depend on the class of injection fluid. The timing of the Directive 051 submission depends on the type of injection scheme and is detailed in ERCB Directive 065.</p> <p>Appendix 1 of Directive 051 directs the licensee to the appropriate sections of the Acts and Regulations for the approval of a scheme for injection or disposal.</p> <p>Note: in addition to meeting the approval requirements laid out in the Acts and Regulations, licensees must also complete a “Well Summary for Injection Disposal Form” as well as a “Well Completion Schematic” and submit this information as part of any application for disposal or injection. Further information respecting the level of detail required for these items can be found in Appendix 4 of Directive 051</p>
Stakeholder Consultation:	Not Applicable
Linkages to other processes or Agencies	ERCB Directive 065 describes the process to apply to the ERCB for injection and disposal wells.
Contact Information	Contact the ERCB Customer Contact Centre at 403-297-8311 (press '0') or e-mail Inquiries@ercb.ca .

Table 28: Drilling Waste Management

Table 28: Drilling Waste Management	
Purpose of Authorization	The ERCB has detailed requirements regarding the land application of drilling wastes including land spreading, mix-bury-cover, landspray, landspray-while-drilling, pump-off, biodegradation (e.g., land treatment), and alternative disposal methods. Drilling waste not being managed by a land application method would be subject to all requirements applicable to oilfield wastes.
Agency Responsible	<ul style="list-style-type: none"> The process is directed and managed primarily by the ERCB. Drilling wastes can also be sent to waste management facilities under ERCB or Alberta Environment responsibility. ERCB ID 2000-3 defines the division of authority between AENV and ERCB for the management of wastes generated in Alberta.
Description of Authorization Process	<ul style="list-style-type: none"> ERCB Directive 050: Drilling Waste Management ERCB IL 2001-03: Management of Drilling Wastes Associated with Advanced Gel Chemicals (Written approval from the ERCB is required for any land application of advanced gel chemical drilling wastes) ERCB Directive 045: Digital Data Submission of Drilling Waste Disposal Notification Directive 045 updates the notification requirements in Directive 050 and identifies the ERCB as being responsible for drilling waste management in the province of Alberta; the ERCB is the appropriate regulatory agency for all notifications related to drilling waste disposal. ERCB ID 99-5: Disposal of Drilling Waste Associated with ERCB Regulated Pipeline or Other Oil and Gas Related Below Ground Boring Activities ERCB ID 81-01: Subsurface Disposal of Drilling Fluids ERCB Directive 058: Oilfield Waste Management Requirements for the

Table 28: Drilling Waste Management	
	<p>Upstream Petroleum Industry, and subsequent updates to it, pertains to drilling waste not being managed by a land application method set out in ERCB Directive 050 (includes sending drilling waste to ERCB- or AENV-approved waste management facilities).</p> <ul style="list-style-type: none"> • ERCB <u>Directive 030: Digital Data Submission of the Annual Oilfield Waste Disposition Report</u> • ERCB <u>ID 99-4: Deposition of Oilfield Waste into Landfills</u> • ERCB <u>ID 2000-4: An Update to the Requirements for the Appropriate Management of Oilfield Wastes</u> • ERCB <u>ID 2000-3: Harmonization of Waste Management</u> <p>Depending on the anticipated method of waste disposal, there may be differing information (informing, notification, approval) requirements at various times during the drilling/disposal process. These information requirements are summarized in Figure 1.2 of <u>Directive 50</u>. The key disposal methods requiring an approval are:</p> <ul style="list-style-type: none"> • <i>Land Treatment</i>: A detailed disposal plan must be prepared and approved by the ERCB prior to commencing land treatment on the well site or remote site. Specific information requirements for the disposal plan can be found in <u>Directive 050</u> • <i>Alternative Disposal Methods</i>: If licensees plan on using a new or innovative disposal method, they must advise the ERCB of their intent as soon as possible and receive approval prior to commencing the alternative method. New mud formulations or additives might also require consideration by the ERCB. • <i>Advanced Gel Chemical Drilling Wastes</i>: Prior written approval from the ERCB is required for any land application of advanced gel chemical drilling wastes. This includes all land applications as described in <u>Directive 050</u>, as well as, any alternative method. This is discussed in more detail in <u>IL 2001-3</u> • Regulated parties seeking a variance from published requirements also require an approval from the ERCB.
Stakeholder Consultation	<ul style="list-style-type: none"> • Notifications are required in accordance with <u>Directive 045: Digital Data Submission of Drilling Waste Disposal Notification</u> • Landowner consent is required on private land when drilling waste is being disposed off the well site or pipeline-right-of-way. If the land is Public Land, then consent must be obtained from Sustainable Resource Development.
Linkages to other processes or Agencies	<p>The process is directed and managed primarily by the ERCB. There are linkages to AENV and SRD for reclamation of sites, remote to the wellsite that generated drilling waste, that were used to store, land spread, mix-bury-cover, or biodegrade drilling wastes, as these sites are considered sites associated to the well and under the definition of specified lands in the <u>Conservation and Reclamation Regulation</u> under the <u>Environmental Protection and Enhancement Act</u>.</p>
Contact Information	<p>For ERCB information, contact the ERCB Customer Contact Centre at 403-297-8311 (press '0') or e-mail Inquiries@ercb.ca.</p>

Table 29: Oilfield Waste Management Authorizations

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<p>Purpose of Authorization</p>	<p>ERCB <u>Directive 058: Oilfield Waste Management Requirements for the Upstream Petroleum Industry</u> sets the ERCB’s expectations on the management of oilfield waste and includes comprehensive regulatory requirements for the handling, treatment, and disposal of upstream oilfield waste. It provides a comprehensive overview of oilfield waste characterization and classification, waste manifesting and tracking, oilfield waste management options and techniques, including those that are one-time options and those that involve permanent infrastructure for repeat uses. Permanent infrastructure used for oilfield waste management require approval as an oilfield waste management facility or component. Authorizations will:</p> <ul style="list-style-type: none"> • Identify the oilfield waste management responsibilities of the licensee and/or approval holder • Promote waste volume minimization • Require the recording, retention, and submission of oilfield waste information that will assist in compliance with waste management practices <p>Hyperlinks:</p> <ul style="list-style-type: none"> • ERCB <u>Directive 058: Oilfield Waste Management Requirements for the Upstream Petroleum Industry</u> (Part D describes requirements for different types of oilfield waste management facilities or components; Part E sets out the information that must be submitted in an application for approval to construct and operate one. Note that there are publications that update or clarify some of the requirements in Directive 058) • ERCB_Directive 058-Addendum 2008-12-23 (provides authorization information for modifications to existing oilfield waste management facilities). • ERCB <u>ID 2000-3: Harmonization of Waste Management</u> • ERCB <u>Directive 047: Waste Reporting Requirements for Oilfield Waste Management Facilities</u> • ERCB <u>ID 2000-4: An Update to the Requirements for the Appropriate Management of Oilfield Wastes</u> • ERCB <u>ID 99-4: Deposition of Oilfield Waste into Landfills</u> • Public involvement requirements are set out in ERCB <u>Directive 056.</u> <p>The above are links to the directives associated with oilfield waste management approvals. For a full suite of information relating to waste management please visit the Energy Resources Conversation Board <u>Waste Management web page</u> which lists the documents pertaining to waste management for which the ERCB is responsible for.</p>
<p>Agency Responsible</p>	<p>The process is managed by the ERCB and, depending on the type of facility, could require involvement from Alberta Environment to manage the environmental impact assessment process, and from Sustainable Resource Development to provide land use authorization through a miscellaneous lease.</p>
<p>Description of Authorization</p>	<p>Authorizations are needed in the following situations:</p> <ul style="list-style-type: none"> • Construction and operation of new oilfield waste management facility

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Process	<ul style="list-style-type: none"> • In some cases, modifications, or amendments to an approved oilfield waste management facilities • One-time approval and pilot projects on approved oilfield waste management facilities or ERCB licensed oil/gas sites <p>Note: Minor modifications to an approved oilfield waste management facilities may only require notification to the ERCB. If applicable, the notification process is outlined in <u>Directive 058-Addendum 2008-12-23</u></p> <p>Listed below are the different types of oilfield waste management facilities. Some oilfield waste management facilities integrate more than one type into one facility (e.g., provide waste processing, transfer, and deep-well disposal services at one facility).</p> <ul style="list-style-type: none"> • Waste storage area/facility • Waste transfer station • Waste processing facility • Surface facilities associated with waste disposal wells (Class Ia or Ib) or waste caverns • Landfill • Biodegradation facility, • Thermal treatment, and • Other oilfield waste management technology or facility <p>Pilot projects/one-time waste operations on existing approved oilfield waste management facilities are required to obtain approval as set out in <u>Directive 058-Addendum</u>. Implementation of waste management technologies not set out in Directive 058 requires submission of an application and ERCB approval as set out in Directive 058.</p> <p>Directive 058 provides options for one-time waste management activities; some options require notification to the ERCB. Implementation of one-time waste management technologies or options that are not set out in Directive 058 require submission of an application and ERCB approval.</p> <p>Key elements of the Directive 058 approval: All applicants for any oilfield waste management facility must address:</p> <ul style="list-style-type: none"> • Introductory information: name of applicant, name and location of facility etc. • Assessment information: information required to assess the impact of the facility and address the possible requirement of an Environmental Impact Assessment for the proposed facility • Site information: topography, soil, hydrogeology, geology etc. • Development information: public consultation (public involvement program) • Closure information: plan to close facility • Design and operation procedures specific to the type of facility being proposed
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	<p>The ERCB will refer any oilfield waste management application that it considers might require an environmental impact assessment to Alberta Environment for further assessment. If AENV assesses that an environmental impact assessment is required, Alberta Environment will manage the process and the Environmental Impact Assessment report will be filed with the application to the ERCB for the proposed facility.</p> <p>Oilfield landfills approved by the ERCB (waste management Approvals) are subject to a full security deposit liability management program as set out in Part 16.6 of the Oil and Gas Conservation Regulations. This program requires Waste Management (WM) Approval holders to provide a security deposit equal to 100 per cent of the costs to suspend, abandon, remediate and reclaim their sites, based on site-specific liability assessments approved by the ERCB. All other types of approved oilfield waste management facilities are subject to the requirements of ERCB Directive 075: Oilfield Waste Liability (OWL) Program, which is a risk-based industry backstopped program that will assess a WM approval holder's liability risk monthly and on receipt of an application to transfer a WM facility.</p>
Stakeholder Consultation	<p>Public Consultation: The public involvement requirements set out in ERCB Directive 056 are also used for an Oilfield Waste Management Facility (Note: consultation is not necessarily a requirement for one-time or pilot projects)</p> <p>As outlined in Directive 058 Addendum 2008-12-23, if amending or modifying an approved oilfield waste management facility (as opposed to constructing and operating a new waste management facility) confirmation and documentation that the approval holder has conducted public consultation in accordance with Directive 056, including the necessary documentation detailed in Directive 058, must be provided to the ERCB.</p> <p>Notification: For some oilfield waste management activities, landowner notification is required prior to proceeding with an activity and submitted in accordance with:</p> <ul style="list-style-type: none"> • ERCB IL 98-2 for one-time-only land treatment of oilfield wastes, or • Directive 058 for mobile thermal treatment, or • Directive 058 for spreading of oily by-products to roads for licensees and approval holders.
Linkages to other processes or Agencies	<p>Responsibility for the regulation of wastes in Alberta is divided between the ERCB and AENV. The ERCB regulates facilities and activities established to manage oilfield wastes, while AENV regulates facilities and activities established to manage non-oilfield wastes and mixtures of non-oilfield and oilfield wastes. This table deals specifically with oilfield waste management facilities regulated by the ERCB.</p>
Contact Information	<p>For ERCB information, contact the ERCB Customer Contact Centre at 403-297-8311 (press '0') or e-mail Inquiries@ercb.ca.</p>