About the Commission

The BC Oil and Gas Commission (Commission) is the single-window regulatory agency with responsibilities for regulating oil and gas activities in British Columbia, including exploration, development, pipeline transportation and reclamation.

The Commission’s core roles include reviewing and assessing applications for industry activity, consulting with First Nations, ensuring industry complies with provincial legislation and cooperating with partner agencies. The public interest is protected by ensuring public safety, protecting the environment, conserving petroleum resources and ensuring equitable participation in production.

VISION

Safe and responsible energy resource development for British Columbia.

MISSION

We provide British Columbia with regulatory excellence in responsible energy resource development by protecting public safety, safeguarding the environment and respecting those individuals and communities who are affected.

VALUES

Transparency

Is our commitment to be open and provide clear information on decisions, operations and actions.

Innovation

Is our commitment to learn, adapt, act and grow.

Integrity

Is our commitment to the principles or fairness, trust and accountability.

Respect

Is our commitment to listen, accept and value diverse perspectives.

Responsiveness

Is our commitment to listening and timely and meaningful action.
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Oil and Gas Activity Application Manual

Written by the Commission, the Oil and Gas Activity Application Manual is a comprehensive how-to document for oil and gas related permit applications. This manual explains the Commission’s Application Management System (AMS) for oil and gas related permits.

This manual is intended for applicants requiring permits for oil and gas and associated activities. Many industry applicants are familiar with application procedures and operate with a good knowledge of the legal and regulatory requirements and this manual provides a quick reference. Other users may be less familiar with the procedures; therefore, this manual delivers a complete overview of the Commission’s application process. Land owners, stakeholders and other interested parties keen on understanding the Commission’s application process – especially the how, why and what is approved can use this manual. It brings together the pieces of applying for different oil and gas permits and is a good resource in knowing just how involved the application and decision making process is for both industry and the Commission.

Please Note:
This manual is written as a whole and provided to industry in sections to allow permit holders to access activity chapters. It is prudent of the permit holder to review the manual in its entirety and be aware of the content in other sections of the manual.

Additional Guidance
As with all Commission documents, this manual does not take the place of applicable legislation. Readers are encouraged to become familiar with the acts and regulations and seek direction from Commission staff for clarification.

The Commission publishes both application and operations manuals and guides. The application manual provides guidance to applicants in preparing and applying for permits and the regulatory requirements in the planning and application stages. The operation manual details the reporting, compliance and regulatory obligations of the permit holder. Commission manuals focus on requirements and processes associated with the Commission’s legislative authorities. Some activities may require additional requirements and approvals from other regulators or create obligations under other statutes. It is the applicant and permit holder’s responsibility to know and uphold all legal obligations and responsibilities. For example, Federal Fisheries Act, Transportation Act, Highway Act, Workers Compensation Act and Wildlife Act.
Throughout the manual there are references to guides, forms, tables and definitions to assist in creating and submitting all required information. Additional resources include:

- [Glossary and acronym listing](#) on the Commission website.
- [Documentation and guidelines](#) on the Commission website.
- [Frequently asked questions](#) on the Commission website.
- [Advisories, bulletins, reports and directives](#) on the Commission website.
- [Regulations and Acts](#) listed on the Commission website.

In addition, this manual references some application types and forms to be submitted outside of the Application Management System but made available on the Commission’s website. Application types and forms include:

- Heritage Conservation Act, Section 12
- Road use permits
- Water licences
- Master licence to cut
- Certificate of restoration
- Waste discharge permit
- Experimental scheme application
- Permit extension application
Manual Revisions

The Commission is committed to the continuous improvement of its documentation. Revisions to the documentation are highlighted in this section and are posted to the Documentation Section of the Commission’s website. Stakeholders are invited to provide input or feedback on Commission documentation to OGC.Systems@bcogc.ca or submit feedback using the feedback form.

<table>
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<th>Chapter Section</th>
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1. Overview of Oil and Gas Regulations and Application Process

Companies looking to explore, develop, produce, and market oil and gas resources in British Columbia must apply to the BC Oil and Gas Commission (Commission) for activity permit(s). The Commission’s role in permitting oil and gas activities is defined by the Oil and Gas Activities Act (OGAA).

The Commission operates within a legal framework embodied in the collection of acts, regulations, standards, practice requirements and management plans governing the mandate of the Commission and provides a single-window model for oil and gas and associated activity operating permits.

Operators apply to the Commission, and the Commission reviews, assesses and makes decisions on applications. This consolidated single-window authority provides not only a one-stop place for all oil and gas and associated activity requirements, but a consistent application, decision, regulatory and compliance authority. Stakeholders work with one agency; therefore serving the public interest by having an all-encompassing review process for oil and gas activities.

In its day to day operations, the Commission is focused on coordinated, responsive and responsible decision-making. Decisions are made while protecting public safety, respecting those affected by oil and gas activities, conserving the environment, and facilitating equitable participation in production.
Please Note:
This manual is written as a whole and provided to industry in sections to allow permit holders to access activity chapters. It is prudent of the permit holder to review the manual in its entirety and be aware of the content in other sections of the manual.

Please Note:
The Oil and Gas Activities Act defines both oil and gas activity and related activities and the Commission adheres to the definitions. The Commission’s glossary and acronym listing is an extension of this manual and defines terms used throughout the oil and gas activity. Applicants and permit holders should refer to the glossary to understand the exact definition of terminology as it may differ from other regulatory bodies. Due diligence is required to ensure proper understanding of terms, acronyms and legislation.

1.1 Commission’s Permitting Authorities

The Commission’s specific permitting authority is defined in the Oil and Gas Activities Act (OGAA). In order to effectively function as a single-window regulator for oil and gas in British Columbia, delegation agreements are in place to allow the Commission to make decisions on certain oil and gas uses within the parameters outlined in those agreements. In addition, certain authorizations granted through specific Acts provide the Commission permitting powers under specified enactments.

Permits and authorizations granted by the Commission include:

- Oil and gas activity permits under the Oil and Gas Activities Act, including well, pipeline, facilities, road and geophysical permits.
- Associated oil and gas activity authorizations under the Petroleum and Natural Gas Act or Land Act, as applicable, including activities such as investigative use, aggregate operations, work spaces and camp sites.
- Authorizations and approvals under the Water Sustainability Act, including authorizations and approvals for changes in and about a stream, short-term water use and water licences.
- Non-farm use of lands included in the Agriculture Land Reserve (ALR), under delegated authority under the Agriculture Land Commission Act.
- Master licences to cut and cutting permits and road use permits under the Forest Act.
- Archaeology-related permissions under the Heritage Conservation Act.
Specific provincial authorizations related to pipelines subject to the Canadian Energy Regulator Act.

The Commission provides regulatory oversight at every stage of oil and gas development, working with a broad range of stakeholders. Commission staff have the legislative authority to make decisions on proposed oil and gas activities. In addition, the Commission:

- Tracks permit holder compliance.
- Reviews operational submissions.
- Provides guidance and processes for operators to submit applications and operational requirements.
- Conducts inspections and responds to incidents.
- Takes compliance and enforcement action when needed.

Other Regulatory and Technical Considerations

In addition to the regulatory and technical considerations outlined in this manual, applicants and permit holders should be familiar and understand other provincial and federal regulations, local authority requirements, industry recommended practices, Canadian Standards Association, labour board laws, and workers compensation rules in order to operate in British Columbia.

1.2 Commission’s Application Process

Companies must adhere to the Commission’s application requirements throughout the entire application process. As shown in Figure 1-A, once pre-application requirements are complete, companies prepare and compile the relevant information for submission to the Commission. Following application submission, the Commission conducts a comprehensive technical review of the application based on the characteristics, location and circumstances of the activity.

Permits must be in hand before conducting any activity. Permits may have timelines and/or conditions attached and all conditions must be adhered to. Amendments are required to change or adjust existing permits. Amendment applications must be submitted to the Commission.
This manual focuses on the requirements for the planning and preparation stages and application submission requirements for oil and gas and associated activity permits. The Commission website provides documentation for the latter stages of oil and gas development, including operations, compliance, emergency management and remediation and reclamation. Those areas are out of scope of this manual.

1.2.1 Pre-Application Requirements

Pre-application requirements include securing tenure rights and conducting the required consultation and notification and/or engagement with land owners and/or rights holders. Applicants are also encouraged to engage First Nations prior to submitting an application.

Planning of oil and gas activity should take into consideration the entire lifecycle of the project and the environmental and social impact of the proposed project. The Commission makes available documents and data in the public zone of the website to assist in the pre-planning stages including:

- Area-based analysis approach and documents.
- GIS data.
- Major projects coordination and information.
- Public engagement.
- Water information resources.
- Air quality.

The Application Analysis Tool within the Application Management System can be used to assist with pre-application requirements.

Applications require engineering and technical information and this manual provides assistance in preparing complete and accurate data, attachments and requirements. This applies to both the company and agent or representative submitting information on behalf of the company.
Required Consultation and Notification

Consultation and notification activities are outlined in Chapter 6 of this manual. This formalized public engagement process allows land owners and affected parties to express concerns about proposed oil and gas activity and encourages companies to work proactively and collaboratively with those affected by oil and gas activity.

First Nations Pre-Engagement

Applicants are encouraged to work with First Nations to consider any environmental, heritage and/or community concerns impacted by oil and gas activity. The Commission suggests applicants initiate and build relationships with First Nations communities by discussing the proposed activities with the communities during the project planning phase and to continue the relationship throughout the project lifecycle.

While not required prior to application, engagement with the public and First Nations within a pre-determined Emergency Planning Zone for Emergency Response Contingency Plans is encouraged since emergency plans must be in place for well, facility and pipeline permit holders prior to operation.

Surface Agreements on Private Land

The Commission may permit the construction and operation of oil and gas activities on private land, but access is subject to a land owner agreement. If an agreement with the land owner cannot be made, the applicant or land owner may apply to the Surface Rights Board for assistance.

1.2.2 Application Submission and Review

To submit an application, operators access the Commission's Application Management System (AMS). AMS is an online electronic application submission system, for the majority of oil and gas and associated activities. Operators may apply for a single activity or multiple activities at the same time.
The application system utilizes spatial data submitted by the applicant to verify geographic location of proposed oil and gas activity. The spatial data is an important component since it highlights both the activity and land required. The application system is prompted to automatically activate the specific application tabs based on the activity chosen and the spatial data. Applicants then move through a series of windows within AMS and are prompted to input engineering and/or technical data into the required fields. Additional supporting information may be required in the application information tabs.

The dashboard page serves as a home page once logged into AMS and provides the status of all applications.

Applications are validated by AMS to ensure all required fields and attachments are completed. Validation must be done before users may submit an application. The system will not process incomplete applications. Users, at any time, can validate the application and use the dashboard page to follow the progress of the application from data entry through to review. Within the application tabs there is an overview menu which highlights all outstanding issues that must be addressed before the application can be submitted.

The application system and spatial data requirements are discussed further in Chapter 3 of this manual. Application requirements based on activity and geographic location are detailed in Chapters 4 - 7 of this manual.

Please Note:

An application that has had no activity for three months will appear on the dashboard with a status of “Timed Out”, and then, after an additional three months of “Timed Out” status, the application is removed from the system. Once removed, the application cannot be retrieved.
1.2.3 Application Review

Once complete, the application is submitted to the Commission for review. As shown in Figure 1-A, the Commission conducts a wide range of technical reviews and carries out First Nations consultation during the review and determination process. Technical reviews include engineering (facilities, pipelines or drilling and production), land and habitat, forestry, agriculture, archaeology and environmental management.

During the review and determination process, the Commission conducts a wide range of engagement processes, actively liaising with First Nations, stakeholders, land owners and partner agencies. If the Commission finds minor and/or major deficiencies, the Commission contacts the applicant to clarify details, make revisions and/or provide additional information.

Applicants are able to monitor the status of an application by logging into AMS and checking on the status of the application in the dashboard.

The review process is also supported by dispute facilitation services offered by the Commission's Community Relations department to aid in communication and resolve interest-based differences between applicants and recipients. Further information on the consultation and notification process is detailed in Chapter 6 of this manual.
Amendments to Permits

Permit holders must submit an amendment application to add, modify or change any permitted oil and gas activity and/or associated oil and gas activity. An amendment can include requests for multiple changes to a permit. Multiple amendment applications cannot be submitted for the same permit at once. The Commission will consider only one amendment application per permit at a time.

Engagement, consultation and notification requirements must be met if changes create alterations to the previous engagement, consultation and/or notification.
Please Note:
AMS will restrict the ability to create a duplicate proposed amendment application when an existing amendment application exists with a status of ‘In Progress’.

Application Withdrawals
A request to withdraw an application from review must be received by the Commission from the applicant company after the application has been submitted but prior to a decision being made on the application.

Requests for application withdrawal are made by letter or email submission to a Commission Authorizations Manager. Once a withdrawal request is made, the Commission review team must accept the withdrawal. The application fee is charged to all applications submitted, regardless of whether or not a permit is granted. Once a withdrawal request is accepted by the Commission, the application remains visible on the dashboard page, symbolized by an “x” icon. The dashboard page is discussed in further detail in Chapter 3 of this manual.

Applications not yet submitted may be deleted by authorized users without any acceptance by the Commission. Once deleted, all data will be lost and a new application must be created if the applicant later decides to proceed with the application.

Application Revision
If the Commission finds minor and/or major deficiencies in the application, or requires additional clarification, the Commission contacts the applicant to clarify details, make revisions and/or provide additional information. In the case that a need for revision of application information or spatial data is identified during this process, the applicant company must send an email to revisions@bcogc.ca to request that the application status be set to ‘in Revision’, which will allow the applicant company or representative working on their behalf upload the revised spatial data package or application information. The subject line of this email must identify the email as a revision request, and include the pertinent AA#, applicant company name, and activity type(s) included in the application. This email must also include details on the reason for the revision request.
If changes to the original application are made, the applicant must enter a description of the changes into the space provided on the AMS overview tab. If more space is needed to describe the changes, the applicant must upload a Word document or email that outlines the changes, and where applicable, provide a more detailed summary of revision request. In a case where an application is set to ‘in Revision’ multiple times, this summary must include reasons and details on changes made to the application for the current revision as well as all prior revisions.

Depending on the nature and scope of the revision, additional fees may be calculated. Applicants can upload attachments into AMS for applications with a status of ‘in Review,’ without a status change to ‘in Revision.’

Please Note:

Revisions made to an application will result in application delays as the application will be resubmitted to the application queue in AMS. AMS will then count the age of the application based on the revision date, not the original application date.

Application Contacts

When the Commission needs to contact the applicant to clarify details, make revisions, request additional information and/or distribute permits, the Commission will use the contacts as provided in AMS application. The contacts will be utilized by the Commission for email correspondence as follows:

- The main Proponent contact email on the Overview screen (left box), the default as set up in the Corporate Registry, will be copied on all emails from the Commission.
- The Contact Name on the Overview screen (right box) will be the main contact for all emails from the Commission.
- If a referral agent or land agent is listed in the Administrative tab, they will be copied on all correspondence.
- If an Environmental specialist is listed in the Administrative tab they will be copied on all environmental related correspondence.
- If an Archaeologist is listed in the Administrative tab they will be copied on all Archaeology related correspondence. Please also note that an
Archaeologist contact is mandatory should the application have an Archeology component.

- If more than one person is listed per company/contact in the Administration tab, the Commission will only copy the first person listed and it will be the responsibility for the company/contact to distribute internally/externally as appropriate.

- If an Engineering contact is listed in the Administrative tab they will be copied on all engineering related correspondence. Please also note that an Engineering contact is mandatory should the application have an Engineering component.

- Post approval, the Commission will distribute electronic copies of permit documents to the Proponent Contact and all Permit Distribution Contacts listed by the applicant on the AMS overview screen.

**Please Note:**

Contact information shown within the contact drop down list under the Administration Tab populates from accounts in the BCOGC KERMIT Registry. If a specific contact is not available in the contact drop down list; the contact must ensure an account has been created. A contact can create an account by clicking on the Online Services link located at the top of the BCOGC website and navigating to Additional Links – Create an Account / Change Password.

### 1.2.4 Application Post-approval

Post-approval, activities must be carried out in accordance with the permit, OGAA, regulations and any other applicable laws. Permit holders must adhere to the operational and reporting requirements throughout the life cycle of the oil and gas and associated activity. Operational manuals are found on the documentation section of the Commission’s website.

Once a permit is issued, permit holders are responsible for all permit holder obligations (as defined in OGAA), including outcomes of actions of contracted personnel in carrying out permitted oil and gas activities on behalf of the company.
An applicant or permit holder may have the right to review and/or appeal a determination as established in OGAA. Guidance on the review process is found in Chapter 7 of this manual. Instructions regarding appeals are obtained from the Oil and Gas Appeals Tribunal.

**Construction Start Dates**

Permit holders must wait 15 days from the day the permit is issued before commencing any oil and gas activity on private land, unless the land owner has consented in writing that the oil and gas activity may commence. Written consent from a land owner is not required to be submitted to the Commission; however the permit holder should retain records.

The permit holder must submit a notice of construction start to the Commission prior to the start of construction activities. Leave to open is required prior to operation of a pipeline or facility. Minimum time requirements for submission of notice of construction start for various activities are outlined in the regulations and permit conditions specific to the activity.

**Notice of Maintenance**

The permit holder must submit a notice of maintenance to the Commission two (2) working days prior to the commencement of any change in or about a stream associated with maintenance activities, as authorized in the permit. Minimum time requirements for submission of notice of maintenance for various activities are outlined in the regulations and/or permit conditions specific to the activity.

A Notice of Maintenance is submitted by completing a Notice of Maintenance form and submitting by email to OGC.ExternalNotifications@bcogc.ca

**Emergency Planning and Response Programs**

The Oil and Gas Activities Act requires permit holders to prepare and maintain an emergency response program and a response contingency plan as prescribed in the Emergency Management Regulation (EMR). The requirements and processes described in the EMR and the Commission’s Emergency Management Manual are designed to create a framework for the protection of the public, property and the environment from emergencies arising out of oil and gas activities.
1.3 Applicant Obligations

In preparing and submitting an application, applicants are expected to consider the environmental and social impact of the proposed oil and gas activity. Companies must, as part of the planning stages, take into consideration the surface and subsurface locations in order to minimize impacts on the social and environmental values. It is the expectation of the Commission that oil and gas sites, once deactivated, will be restored and reclaimed at the end of the project; therefore, careful planning beforehand is required to ensure a successful project end.

When completing application and/or submitting additional reports, companies must provide engineering and technical information on activities carried out during the proposed term. Companies must provide true and accurate information and not knowingly omit relevant information. All data, attachments and requirements must be complete and accurate. If an agent or representative submits information on behalf of the company, the applicant remains accountable for the accuracy of submission.

Activity Area Overlapping a s.16 or s.17 Land Act Disposition Established by the Ministry of Forests, Lands, Natural Resource Operations and Rural Development

Applicants wishing to submit a new application or an amendment must consider proposed activities that fall within a s.16 or s.17 Land Act disposition that has been established by FLNRORD. For proposed activities that will impact land subject to a s.16 or s.17 Land Act disposition, applicants must complete a FrontCounter BC Application Form for Proposed Activities within Established Section 16 or 17 Land Act Dispositions and submit the form, prior to commencement of operations, to FrontCounter BC to request a decision whether to amend the Land Act disposition or determine compatibility to the established disposition.

Permit holders must obtain approval (as defined in OGAA) before starting any oil and gas or associated activity(s) and should maintain ongoing dialogue with the Commission and stakeholders throughout the lifecycle of the project. This includes operational and reporting requirements and continued engagement as defined in operations manuals.
Once approved, permit holders bear responsibility for all permit holder obligations (as defined in OGAA), including outcomes of actions of contracted personnel in carrying out permitted oil and gas activities on behalf of the company.

1.4 Compliance and Enforcement

Applicants have a legal obligation to meet all legislated requirements. The Commission expects applicants and permit holders to use formal practices in day-to-day operations and comply with the Oil and Gas Activities Act, the Commission’s specified enactments, and all related regulations.

The Compliance and Enforcement Manual provides further information about the Commission’s compliance processes. It is the permit holder’s responsibility to know and uphold any legal responsibilities inside and outside of the Commission’s legislative authority. The Commission audits and inspects permit holder activities and investigates incidents of alleged non-compliance.

1.5 Commission Authority under Section 26 of OGAA

Under Section 26 of the Oil and Gas Activities Act (OGAA), the Commission has the authority to refuse, suspend, cancel, or amend a permit.

When making a decision under Section 26, the Commission can consider the conduct of an applicant or permit holder. In addition, the decision maker may look beyond the applicant or permit holder to consider the conduct of a person (which includes a corporation) associated with an applicant or permit holder.

An associate means any of the following:

1. an agent of the applicant or permit holder;
2. a director, officer or shareholder of the applicant or permit holder;
3. a person who, in the Commission’s opinion, may have influence over the applicant or permit holder or may be able to affect the activities permitted by the permit.

Section 26(2) and (3) of OGAA provide a non-exhaustive list of circumstances that may trigger a decision under Section 26. The following is a list of factors that the Commission may consider in making a decision under Section 26(1):

- Compliance history of the applicant or permit holder, or an associate of the applicant or permit holder.
- Corporate structure of the applicant or permit holder, or an associate of the applicant or permit holder.
- Experience of the applicant or permit holder, or an associate of the applicant or permit holder.
- Financial health of the applicant or permit holder, or an associate of the applicant or permit holder.
- Financing of the applicant or permit holder, or an associate of the applicant or permit holder.
- Outstanding debts owed by the applicant or permit holder, or an associate of the applicant or permit holder.
- Outstanding non-compliances of the applicant or permit holder, or an associate of the applicant or permit holder.
- The applicant or permit holder, or an associate of the applicant or permit holder, has been convicted of an offence as described in Section 26(2)(f) of OGAA.
- Involvement of the applicant or permit holder in bankruptcy or receivership proceedings.
- Involvement of an associate of the applicant or permit holder in entities that have initiated or are subject to bankruptcy or receivership proceedings.

In addition, the Commission may make a decision under Section 26(1) of OGAA where there is a relationship (such as employer / employee, officer, director or agent) between an applicant or permit holder and a permit holder that has previously been the subject of a decision under Section 26(1).
Before making a decision under Section 26(1)(b), (c) or (d) of OGAA to suspend, cancel or amend a permit, or under Section 26(5) of OGAA to suspend or cancel an authorization for a related activity, the Commission must provide the permit holder with an opportunity to be heard. The opportunity to be heard may be conducted in the time and format the Commission deems appropriate, pursuant to Section 80 of OGAA.

1.6 Freedom of Information & Protection of Privacy

Throughout the course of application preparation and planning, the information collected from a person or other entity may contain personal information as defined by the Personal Information Protection Act (PIPA). Private sector organizations collecting personal information in British Columbia are subject to the PIPA, which sets out the rules for how personal information may be collected, used or disclosed.

Applicants and permit holders should comply with PIPA when collecting information from persons or entities and can contact the Office of the Information and Privacy Commissioner for British Columbia for more information.

As a public body, the Commission is subject to the Freedom of Information and Protection of Privacy Act (FOIPPA). Any personal information contained in plans or applications submitted to the Commission are subject to the protection and security requirements identified in FOIPPA.
2. Requirements for First Time Applicants

This Chapter details the administrative requirements of all first time applicants in order that a company may begin the application submission procedures. Applicants engaging in oil and gas activities must complete all pre-application requirements as detailed in Chapter 1 and must be registered in the Commission’s corporate registry.

New applicants must register with Petrinex as a Business Associate (BA) and complete a Master Licence to Cut Application Form (MLTC) if they will be submitting applications which require new cut under Cutting Permits (CP). In addition, companies are required to set-up administration and account information in order to use the online submission application system. Both new companies and existing companies are responsible to ensure the account information is current and up-to-date in the corporate registry.

2.1 New Business Associates

The Commission maintains a corporate registry of companies. The New Business Identifier Application in Petrinex captures general administrative and corporate registry information and is required before submitting an oil and gas activity application(s). A New Business Identifier Application and the required attachments are submitted to the Commission via Petrinex for approval. For more information, refer to the Commission’s Permit Operations and Administration Manual.
BC Corporate Registration

In order to conduct business in British Columbia, a company must be registered with BC Registry. A copy of the corporate registry certificate must accompany the New Business Identifier Application.

Company Administration & Account Information for Commission Information Systems

As part of the New Business Identifier process, the Commission creates a system administration account for the applicant company. Companies must then designate authorized individuals with an application security role on behalf of a company. Companies are required to assign roles in the corporate registry as follows:

1) Finance role assigned to an individual for managing account information and giving individual(s) authorization to make payments.

2) Representative roles assigned to experts for inputting technical and required application information. Each contractor is registered as a person associated to a company or granted security from a company. A notification email to the professionals, specialists and/or contractor is triggered when such individuals are identified as such in an applicant's application. This email acts as a verification of services.

3) Administrator role with security to set up and administer account roles.

Users may access the Application Management System or KERMIT from the Commission's website. It is recommended to access the online systems through a high speed internet connection to maximize performance. Only one account is required to access and use the Commission's online services, including KERMIT and the Application Management System. KERMIT is the Commission's Knowledge, Enterprise, Resource, Management, Information and Technology data system. KERMIT enables electronic submission of performance and/or compliance data and accepts various operational submissions related to oil and gas activities post approval. Access to the KERMIT system is available on the Online Services page of the Commission's website.

New Representatives

New representatives must create a KERMIT account using the Commission's Online Services page in order to be selected by an applicant as part of a permit application in AMS.
Once the account is created, the representative should contact the company administrator of their organization to associate the new account to the representative’s company. If the representative’s company does not exist in AMS, the New Business Identifier process must be completed in Petrinex.

New representatives must also contact the applicable company administrator of the representative’s company to ensure the appropriate permissions are assigned to the new account.

### 2.2 Master Licence to Cut

A Master Licence to Cut Application Form (MLTC) must be completed and submitted before applying for any oil and gas activity. The MLTC governs cutting permits authorizing the removal of timber on Crown land and a separate MLTC is required for each forest district. For more information, refer to the Commission’s Permit Operations and Administration Manual.
3. Application Management System Submission Process

This chapter walks an applicant through the steps of applying, submitting and confirming an application using the Commission's online application system. The system is used for the majority of oil and gas and associated activities permit applications.

The Application Management System is an online portal applicants use to submit oil and gas and associated activity applications. Users may prepare multiple permit applications at the same time by selecting one or all of the activities of the oil and gas project. Multi-activity applications provide a complete picture of the project and the Commission encourages applicants to consider applying for all activities at the same time.

AMS allows application information to be completed online. Attachments are uploaded directly. The online application submission process includes:

- Using the analysis tool.
- Reviewing the dashboard.
- Creating a new application.
- Uploading spatial data.
- Completing an application.
- Validating an application.
- Submitting completed application.
- Paying application fee.
Registered applicants are ready to begin the application submission process once the pre-planning stages (Chapter 1 of this manual) are complete and the administrators and/or agents for a company are registered in the Corporate Registry (Chapter 2).

**Application Management System Analysis Tool**

Since the surface location of oil and gas and associated activities is one of the pertinent pieces of information used in the planning and preparation stage, applicants are encouraged to use the pre-planning application analysis tool in AMS and become familiar with the electronic validation requirements.

The spatial layers used in the analysis tool are provided in the Commission’s [Spatial Data Submission Standards Manual](#). This document is available on the Commission website and for download within the Application Management System. The spatial data used within AMS is available for download through the [Data BC Catalog](#) however the use of the analysis tool should reduce or eliminate the need to access other sources of spatial information.

Spatial data is uploaded into the application analysis tool and an Application Analysis Tool Report is produced to highlight areas overlapping the surface location of the proposed activity, including tenures, land and resource planning zones, and areas established by order. Applicants can use the information from the analysis tool to plan engagement activities and/or mitigation strategies. The analysis tool highlights many, but not all of the specific application requirements. Due diligence must be done by the applicant to verify information and requirements, including but not limited to; looking at the land.

An applicant may choose to create an application from the analysis tool if the spatial data can be validated, the applicant is satisfied with the polygon shape locations and the applicant wishes to continue on to the create application stage.

### 3.1 Application Management System Dashboard

The dashboard lists all applications created by the user and the status of the applications including: saved drafts, submitted, withdrawn and in review. At any point in the application process, the dashboard screen can be accessed as it is the main screen and greets users
upon sign-in. A printed copy of an application may be saved or printed in hard copy from the dashboard screen. An example of the dashboard screen is show in Figure 3-B.

**Figure 3-B: Screen Shot of Dashboard Page**

<table>
<thead>
<tr>
<th>Application</th>
<th>Revision Number</th>
<th>Status</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1002957</td>
<td>0</td>
<td></td>
<td>Well, Geophysical</td>
</tr>
<tr>
<td>1002968</td>
<td>0</td>
<td></td>
<td>Wall</td>
</tr>
<tr>
<td>1001994</td>
<td>0</td>
<td></td>
<td>Wall</td>
</tr>
<tr>
<td>1001993</td>
<td>0</td>
<td></td>
<td>Well, Geophysical</td>
</tr>
</tbody>
</table>

### 3.2 Creating a New Application

New applications or permit amendment applications are initiated in the AMS Create Application screen and/or from the Application Analysis Tool (once validated). Applicants are prompted to identify the application type, applicable activities, proponent name and description of proposed project.

New applications may be for a single activity or multiple activities. The Commission encourages applicants to apply for the entire project at the same time by creating a new application and selecting each activity required for the oil and gas project (i.e. multiple activities).

**Please Note:**

The Application Management System requires specific data standards to appropriately populate both activity and application information. Activities, such as wells and pipelines, require specific polygon information. AMS pulls spatial data from the activity polygon and pre-populates some data fields in the activity tab. Application information is also linked directly to spatial data, specifically land or area polygons. Application information such as forestry or agricultural land is required based on the land/area specified in the spatial data.

Additional requirements when creating a new application include:
1) Description of proposed project and/or activity including; timelines, scope of operations, activity levels, and other pertinent information to paint a picture of the operation.

2) Spatial data as described in Section 3.4 of this Chapter.

3) Agreement to the terms and conditions of submitting an application. Terms and conditions are presented within AMS. Applicants should read both the terms and conditions and the applicant obligations (Section 1.3 of this manual).

Please Note:
The Oil and Gas Activities Act defines both “oil and gas activity” and “related activities” and the Commission adheres to the definitions. The Commission’s glossary and acronym listing is an extension of this manual and defines terms used throughout the application process. Applicants should refer to the glossary to understand the exact definition of terminology as it may differ from other regulatory bodies. Due diligence on the part of the applicant is required to ensure proper understanding of terms, acronyms and legislation.

3.2.1 Activity Types

Applicants are prompted to select the activity type(s) for all activities associated with the permit(s) required for the project. Users are able to create multiple permit applications by selecting one or all of the activities of the oil and gas project. In addition, when applying for an oil and gas activity which requires short-term water use or changes in and about a stream, applicants must be diligent in applying for all activities in order to ensure regulatory compliance. Applicants are asked to select the appropriate oil and gas application submission type as follows:

- New OGAA activity including wells, roads, pipelines, facilities, geophysical, and related activities which are associated oil and gas activities and Water Sustainability Act authorizations.

- New CER Related applications pertaining to activities associated with pipelines regulated under the Canadian Energy Regulator (CER) Act and include: pipeline right-of-way, road right-of-way, ancillaries and Water Sustainability Act authorizations.

- Amendment applications when changes to existing permits are required.
• Other submissions including agricultural land assessment, Forest Act as well as historical facility, historical pipeline, and historical road submissions.

CER Related Activity

The Commission has authority to issue specific provincial authorizations related to pipelines regulated under the Canadian Energy Regulator (CER) Act. These authorizations differ from other authorizations issued by the Commission under a specified enactment, as they are not related to an OGAA activity however, they can still include:

• Land Act, Sections 11, 38, 39 40 and 96.
• Forest Act, Sections 47.4 and 117.
• Water Sustainability Act, Sections 10, 11 and 24.

New CER-reviewable pipeline right of way applications are submitted to the Commission for authorization to use and access provincial Crown land. Other additional provincial permits may be required including:

• Authorizations for occupation of Crown land under a Land Act Section 39 License of Occupation for the pipeline right of way, and under a temporary Land Act Section 39 License of Occupation for ancillary land use (decking sites, workspaces, shooflies, etc.). Post-construction, and after surveying requirements are met, a Land Act Section 40 Statutory right of way is issued for the pipeline right of way.

• Approval under Section 11 of the Water Sustainability Act (changes in and about a stream) for stream or water body crossings and Section 10 of the Water Sustainability Act (short-term water use) to divert or use water for oil and gas purposes.

• Cutting permit authorizations under Section 47.4 of the Forest Act to harvest Crown timber, and under Section 117 for a road use permit to use forest service roads, if required.

For more detailed information on CER related projects, refer to Chapter 7 of this manual.
3.2.2 Construction Corridor

A construction corridor is additional area mapped and shown spatially around the application area that allows a permit holder some flexibility in the movement, placement and construction of a permitted oil and gas activity. Using this approach can greatly reduce the need for permit amendments, subject to the terms and conditions of the permit.

If a construction corridor will be used, the application must identify the total proposed area of each activity within the construction corridor and their proposed location(s) on both Crown and private land. The width and size of the construction corridor is left to the discretion of the applicant. The construction corridor must meet all application requirements, as though it was part of the activity footprint. This includes but is not limited to environmental and archaeological assessments; First Nations engagement as well as consultation and notification or rights holder engagement.

Any changes made from the permitted area within the construction corridor must be reflected on the post construction plan submitted to the Commission. Upon acceptance of the post construction plan, all activity placements are final; any future modifications would require an amendment.

Construction corridors are a particularly useful tool for IUPs, microseismic applications, or for any application where there is some uncertainty regarding logistics, terrain or potential construction constraints that are anticipated to arise during final layout or construction.

3.2.3 Proponent Information

As discussed in Chapter 2 of this manual, the project proponent, or applicant, must register with the Commission. This information is populated in AMS from the Corporate Registry. The applicant selects company name from the drop down list in AMS. If the oil and gas applicant is not displayed, refer to the New Company Registration section in Chapter 2 of this manual.
3.3 Uploading Spatial Data

Spatial data uploaded by the applicant pre-populates spatially derived application requirements based on geographic location of oil and gas and associated activities and any overlapping or intersecting points. Spatial data is generally required regardless of land status. There are very few exceptions where spatial data is not required.

Spatial data for AMS must meet stringent data standards in order to be accepted by the system. Shape file templates are available for download within AMS to support spatial submissions. Business validation rules specific to the spatial data must be followed when preparing spatial submissions. Applicants should review the business validation rules listed and technical guidance in the Commission’s Spatial Submission Standards document.

Spatial submission standards do not apply to spatial data used with the analysis tool. However, the spatial submission standards must be upheld when uploading spatial data as part of an application. The Commission is not able to accept spatial submissions other than those which meet the standards.

Once the spatial data is uploaded, the system performs a data analysis for validation purposes. The Application Management System provides a list of issues to be addressed if the spatial data does not uphold the submitted data requirements. The issues must be addressed and resubmitted.

In each activity-specific section of AMS, a globe symbol references pre-populated spatial data linked directly to the spatial files uploaded. The map is viewed anytime by clicking on the map icon at the top of the screen.
Please Note:

When uploading new spatial files into AMS for a permit application, previously entered spatial data will be deleted by the system and replaced with the new data. In addition, location UTM coordinates are mandatory and are not editable. This data populates into the application from spatial data uploaded with new applications. For amendments, UTM coordinates are populated from the permitted data if spatial data is not uploaded for the amendment. Where UTM coordinates do not exist in the permitted data, this data field will be blank in an amendment and the user will be required to update the UTM location by uploading the required spatial data using the “update location” button, located next to the UTM data field. This requirement is applicable to well, pipeline, facility, road, STWU, and CIAS applications.

3.4 Application Management System Identification Numbers

To support the transformation to multi-activity applications, the Commission’s Application Management System uses unique numeric identifiers to identify both applications and activities. A unique identification number is given to all applications, spatial data polygons, activities and specific parts of activities as follows:

**Application Number**

Each application submitted in AMS is assigned a unique nine digit application number. This number is automatically generated at time of application and is visible on the dashboard page. Applicants can search for an application by this number. The application number represents all activities included in the submission.

**Application Determination Number**

An Application Determination number is assigned to an approved or permitted activity or set of activities (multi-activity application). The Determination Number can be referenced by the permit holder for amendments.
Land Identifier Number (Land ID)

Applications requiring land authorization must include one or many polygons. Each individual polygon is assigned a unique nine-digit Land Identifier (LAND_ID) number. It is automatically generated by the system and is referenced by the permit holder throughout the lifecycle of a project, including amendments and post permit activities. For example, a pipeline project right of way crossing Crown and private land must be submitted as two individual polygons, each of these polygons is assigned a unique LAND_ID.

Land Area Number (LA NUM)

Multiple unique polygons uploaded together and representing all land required for a particular activity, are assigned a nine-digit Land Area number (LA_NUM). For instance, within a multi-activity permit, the unique polygons representing a pipeline project right of way are assigned a Land Area number, and a well site is assigned a different Land Area number. The Land Area number enables a complete land based review at a comprehensive level.

Activity Identifier Number

Each activity within the application is assigned an Activity Identifier Number. This number is automatically generated by the system. An example of a specific Activity Identifier Number would be each well in a multiple well application assigned a well authorization (WA) number. The Activity Identifier Number is relevant during the application stage as information and/or data for each activity is required and must correspond to the correct identifier number as presented in the activity information tab.

In addition, permit holders must refer to this activity identifier number for permit holder reporting and submissions.

Additional Identification Numbers

For some activities, for example, road segments; pipeline segments and pipeline installations an additional number is assigned to each part of the activity. The assigned segment number is automatically generated by the system. As with the activity identifier number, the identification number is relevant for permit holder reporting and submissions.
Figure 3-C: Example Identification number assignment to spatial polygons, groups of polygons, activities and parts of activities

Please Note:
The Application Management System has a different numbering system than in the past; therefore, the Commission discontinued the creation of OGC File Numbers. Existing OGC File Numbers attached to current permits will continue to be used as permit reference numbers (under the label ‘legacy OGC number’) required for submission of reporting and/or amendments. New permits will reference an Application Determination number (AD No.).

3.6 Completing an Application

Based on the activities identified by the applicant and the spatial data, AMS populates activity-specific tabs. The screen prompts applicants for required activity-specific engineering and technical information, additional information to support the application and upload attachments.
User Navigation

Navigation panels as shown in Figure 3-D provide applicants with the ability to move between the various tabs. Activity-specific information, including spatial data, often has a cascading effect on application information. The engineering and technical information provided in the activity tabs may have an impact on the information tabs; therefore it may be prudent to complete the activity tab before moving on to the application information. The validation tool will assist in highlighting any missed data input.

Figure 3-D: Screen Shot of Navigation Panel and Overview Page

Applications may be validated and then saved at any time. While an application is in progress, users are able to add information and/or upload attachments over a period of time, returning to AMS and continuing to enter data without any interruption or loss of information.
Overview Screen

The overview page (as shown in Figure 3-D above) provides a summary of the application and activity applied for. The overview page is accessible after creation of the application and is specific to each application. This is different from the dashboard panel, which summarizes the status of all applications created by the proponent.

3.7 Data Field Completion

Application submission requires the input of technical and engineering information by following the instructions, answering questions and entering data where required within the Application Management System. The data input fields are defined where necessary through mouse over hints, links to glossaries and this manual.

Some spatially derived data fields are identified with a globe symbol. This symbol indicates data is pre-populated by spatial data linked directly to the spatial files uploaded. Applicants have the ability to alter some of the data fields (altered data is italicized) if required. Applicants will be prompted to enter a reason for change when altering spatially derived fields in an application.

Additionally, spatially derived data fields may trigger additional requirements. Some fields may not be visible if information is not required.

The validation button assists in verifying a complete application. Outstanding requirements, for example: fields not yet completed and/or attachments not yet uploaded, are highlighted in the application overview and on the validation screen. All mandatory data fields must be completed in order for the Application Management System to allow submission.

Attachments are uploaded directly within the application or activity tab(s) and must meet specific size and file formatting restrictions as defined in Section 5.8 of this manual. Attachments may be amended or verified in the Attachments tab.

In addition to this manual, mouse-over hints within AMS provide quick access information. The content of mouse-over hints corresponds to the information provided in application instruction tables at the end of each activity and application information section of this manual.
3.7.1 Application Information Tabs

Application information to support the activity may be required depending on the type and location of activity. As shown in Figure 3-E below, all tabs within the application information section are visible to the user, although not all tabs require populating of data. Requirements for spatial data are detailed Section 3.4 of this manual and all other information tabs are presented in Chapters 5 and 6. Application information tabs include:

- Spatial data
- Administrative
- Land
- Forestry
- Stewardship
- Agriculture
- Archaeology
- Consultation and notification
- Rights holder
- First Nations
- Maps and plans
- Attachments

Figure 3-E: Screen Shot of Application Information Tabs
3.7.2 Activity-specific Tabs

Activity-specific tabs are only activated if the activity is chosen when creating a new application or if an additional activity is added to the draft application. Activity-specific requirements are detailed in Chapter 4 of this manual and include:

- Well
- Pipeline
- Facility
- Geophysical
- Road
- Associated oil and gas activity
- Short-term use of water
- Changes in and about a stream

3.7.3 Validating an Application

The AMS validation feature is used to ensure applications are complete and correct prior to submission to the Commission and can be used at any time when completing the activity and application tabs.

If an application is invalid, AMS provides a checklist of outstanding items to be completed or corrected before the application can be submitted.

Once completed, click on the Submit Application button and the Application Management System will confirm application submission. The submission of the application prompts AMS to produce an invoice for payment, if applicable.
3.8 Paying Application Fee(s)

Oil and gas activity applications are subject to the application fees prescribed within OGAA and the Fee, Levy and Security Regulation. An electronic application receipt and processing system within the Application Management System allows applicants to pay application fees electronically.

Once an application is finalized and submitted, the Application Management System calculates application fees and populates a series of fee payment screens and prompts user for payment. An electronic funds transfer account number is the only acceptable form of payment. AMS enables payment of numerous transactions at once.

If the user is not set up with administrative abilities to pay invoices, an invoice is automatically generated and forwarded to account administrator on file. The user can elect to pay application fees at the time of application submission or use the “Pay Later” function to delay payment for up to 30 days. To pay, an administrator with abilities to pay invoices signs into AMS and is directed to the payment screen. The Application Management System prompts for an electronic funds transfer account number and payment of outstanding invoices giving the company the option of paying one or all invoices at the same time. AMS provides confirmation of payment information.

An invoice must be paid, regardless of whether or not a permit is granted. Failure to submit payment may result in actions taken by the Commission including but not limited to:

- Compliance order.
- Contraventions or offences under OGAA.
- Suspension of permit, preventing activity happening on specific permit or other permit.

Applicants with invoices more than 30 days in arrears may not be able to submit new applications. The Application Management System gives a warning upon login to pay outstanding invoices before proceeding with any new applications or amendments.
3.9 Review Process

Once an application is successfully submitted by the applicant, the Commission begins its review. Only submitted applications are reviewed by the Commission.
4. Completing Activity Details

This chapter provides a comprehensive walk through of the Commission’s requirements for completing the activity details in the Application Management System. Each section of this chapter provides an overview of activity, definitions and technical requirements for the activities listed below. Each section corresponds to the activity tab in AMS. Activity-specific requirements (and corresponding section number) includes:

- 4.1 Well
- 4.2 Pipeline
- 4.3 Facility
- 4.4 Geophysical
- 4.5 Road
- 4.6 Associated oil and gas activity
- 4.7 Short-term water use
- 4.8 Changes in and about a stream

Activity-specific tabs are only activated once a new (or amendment) application is created and is based on the activity (or activities) chosen when creating a new application. In addition, the Application Management System is designed to pull geographic location and coordinates from the spatial data uploaded during the application creation stage which triggers activity and land information. A globe symbol references pre-populated spatial data linked directly to the spatial files uploaded.

Additional supplementary information to support the activity may be required depending on the type of oil and gas activity, location and engineering and technical details provided in the activity tab. The application information tabs are visible and the validation tool will assist in ensuring all components of the application are completed. The requirements for the application information tabs are detailed in Chapter 5 of this manual.
4.1 Well Activity Tab

Applicants applying for a well permit must complete the well activity tab in the Application Management System. The well tab is made up of three components: well area overview, well details (further broken down to include sour well, flaring and exemptions) and well land details.

This section includes an overview of well permitting, guidance regarding well planning and design, details related to well-specific application requirements and detailed instructions for completing the data fields of the well tab of the Application Management System.

Please Note:
This manual is written as a whole and provided to industry in sections to allow permit holders to access activity chapters. It is prudent of the permit holder to review the manual in its entirety and be aware of the content in other sections of the manual.

4.1.1 Wells Defined

Wells are an oil and gas activity as defined in OGAA, and are specifically defined in the Petroleum and Natural Gas Act as:

A hole in the ground:

a) Made or being made by drilling, boring or any other method to obtain petroleum or natural gas.

b) Made or being made by drilling, boring or any other method to explore for, develop or use a storage reservoir for the storage or disposal of
petroleum, natural gas, water produced in relation to the production of petroleum or natural gas, waste or any other prescribed substance.

c) Used, drilled or being drilled to inject natural gas, water produced in relation to the production of petroleum or natural gas or other substances into an underground formation in connection with the production of petroleum or natural gas.

d) Used to dispose of petroleum, natural gas, water produced in relation to the production of petroleum or natural gas, waste or any other prescribed substance into a storage reservoir, or

e) Used, drilled or being drilled to obtain geological or geophysical information respecting petroleum or natural gas.

And includes a water source well.

Approved oil and gas applications receive a permit under Section 25 of OGAA to carry out construction and operations pertinent to the activity. The permit expires where construction activities have not started within two (2) years of permit issuance. Unless expired, the permit remains active until cancelled, suspended or declared spent, according to the provisions of OGAA.

Well Names

Well names are generated by, and populated into, AMS automatically when spatial data is uploaded. Well names are based on information gathered at the application stage and formatted as follows:

- Company abbreviation – working interest partner(s) abbreviation – well profile – oil or gas field name – legal location or NTS/DLS legal location.

Each well must have a unique legal location. To distinguish wells within a quarter unit in the PNG grid system or within a legal subdivision in the DLS system, users must identify differing wells with an exception code. Exception codes must be entered into AMS manually to differentiate between multiple wells at a single legal location. Well names are issued by the Commission at the time of permit issuance.
4.1.2 Creating a New Well Activity Application

New Well Applications

A new well permit is required for any new well to be constructed and operated, including re-entering existing wells which have been previously issued a certificate of reclamation.

An application may include a single or multi-well application and may be submitted with other oil and gas activities. The system generates data input requirements for additional wells based on the well-points specified within the spatial data upload. Where multi-well pads are planned, the Commission encourages applicants to submit the all the wells together in one application.

If the subsequent well includes new land, the new land can be included in the subsequent well application.

Well Permit Amendments

A well permit amendment is required for changes to approved well permits as outlined in the following scenarios. Approval of a permit amendment is required before the associated changes are carried out. Amendment scenarios include:

- Surface footprint (surface disturbance) is changed.
- Objective formation(s) or the formation at total depth has changed.
- Expected hydrogen sulphide (H₂S) release rate is changed, resulting in a change of the emergency planning zone.
- Change blowout prevention to a lower class.
- Change to increase permitted flaring volumes.
- Change in well type (for example from Production to Disposal)
- Change in BHL with attendant changes in well profile such that the well name adds or deletes “HZ”.
- Adding (drilling) a new bottom hole location to a well that has previously been drilled and rig released. This can be lengthening, window cutting, or O/H sidetracking from an existing wellbore.
Permit amendments are not required:

- For minor changes if the proposed final total depth (FTD) resulting from geological prognosis change, simple changes to hole size or casing size, addition of a core or a drill stem test (DST) or minor changes in well centre coordinates.

- When changing well head location if there is no change to wells site location. When moving the well head (within the permitted wells site), report the new coordinates on the Summary Report of Drilling Operations (SRDO).

**Please Note:**

Neither the working interest partner nor the oil and gas field name can be modified through an amendment application. To change the working interest partner a permit holder is required to submit a **Well Name Change Notification Form** to assetmanagement@bcogc.ca. To change the oil and gas field name, send a request to OGCservicedesk@bcogc.ca.

**Well Identification**

The well must be identified by type, sequence and drilling direction.

1. **Well type:**
   - Gas is a well drilled for the primary purpose of extracting natural gas.
   - Oil is a well drilled for the primary purpose of extracting oil.
   - Water source is a well drilled to obtain water for the purposes of injecting water into an underground formation in connection with the production of petroleum or natural gas.
   - Injection is a well drilled or operated for the primary purpose of injection into a subsurface formation to increase oil recovery or the storage of natural gas. It can be either water or gas injection.
   - Disposal is a well drilled or operated for the primary purpose of disposal of fluids that are a by-product of production.
   - Observation is a well drilled to observe production parameters.

2. **Exception code:**
   - The first well being applied for within a quarter unit in the PNG grid system or within a legal subdivision in the DLS system, will use the defined NTS or DLS legal location.
• Since each well must have a unique legal location, additional wells within a quarter unit in the PNG grid system or within the legal subdivision in the DLS system, must distinguish each well with an exception code. Exception codes do not have to be in sequence based on the order in which the permit holder plans to drill them. Depending on the number of wellsites in a quarter unit and the order in which wells were applied for, exception codes may not be sequential on a single wellsite.

3. Well drilling direction

• Directionally drilled wells are greater than a five degree inclination for a minimum of 150 metres of measured depth.

• Horizontally drilled wells have a greater than an 80 degree inclination for a minimum of 100 metres of measured depth.

Both injection and disposal wells require a permit to construct and complete a well. In conjunction, an additional order or permission is required under s. 75 of OGAA before a permit holder can use a particular sub-surface formation for the purpose of disposal or injection. This can be obtained via an amendment to the original permit or independently, depending on the specifics of the case. Contact the Commission’s Reservoir Engineering department for more information regarding orders allowing for injection or disposal.

Well Classification

Wells are classified as development, exploratory wildcat, exploratory outpost, discovery, special data or observation well as defined in Section 2 of the Drilling and Production Regulation. To determine the classification of a well, refer to the High Resolution Map of Schedule 2 Unconventional Zones and Shape Files available on the Commission’s website.

The Commission may reclassify a permitted well, post approval, if a well, or a portion of a well (in the opinion of the Commission) resulted in a discovery of prior unknown factors.

The Commission may reclassify re-entries if a well is re-entered and a new pool is not identified. Well information obtained during the re-entry is released in accordance with the classification assigned to the re-entry event.
The classification assigned to the well is reflected on the well permit letter. It is the permit holder’s responsibility to review the classification assigned and follow-up with the Commission if there are any questions.

### 4.1.3 Well Planning and Design

This section provides typical planning and design requirements, guidelines and considerations when planning and designing a well for an oil and gas activity application. The standards and guidelines presented here form a substantial basis for assembling an application. The Commission reviews the well application relative to the engineering and technical information provided in AMS; therefore, applicants should review this section for an indication of any application requirements or attachments required in relation to the components.

#### Regulatory Requirements

Well activities must meet the design and operational requirements outlined in the *Oil and Gas Activities Act* (OGAA), *Drilling and Production Regulation* (DPR), the *Environmental Protection and Management Regulation* (EPMR).

If an exemption is requested from regulatory requirements, an exemption request may be submitted prior to an application, with an application, or after a permit has been issued. It must include:

- Specific regulatory provision requiring an exemption.
- Rationale for exemption (explanation of why an exemption is required).
- Proposed plan showing mitigation strategies to reduce impacts.

If exemptions are approved prior to the application, this approval must be attached to the application.

Specific well exemption considerations include:

- Inline testing is required for all new wells within 1.25 kilometres of a residence and 3.0 kilometres or less of a suitable pipeline. If an exemption is desired for a specific well, a justification for the exemption
must be included with the permit application. Exemption considerations are outlined in Commission Directive 2010-03.

**Guidance Requirements**

In addition to the requirements articulated in the Oil and Gas Activity Application Manual, well activities should meet guidance recommendations in the following Commission documents:

- Oil and Gas Activity Operations Manual.
- Inline Testing Directive.
- Supplementary Information for Water Source Wells.

If oil and gas activities cannot adhere to the guidance recommendation then justification for a variance must be included in the permit application. Include specifics of the guidelines not followed, an explanation of why they cannot be followed, proposed plan and mitigation strategies.

**Advisory Guidance**

The Regional Health Authority must be contacted prior to construction of the camp sump and disposal of sump fluids before reclamation. Locations of the various Health authorities are:

- 1001-110th Avenue, Dawson Creek, B.C., (250) 719-6500.
- 5217 Airport Drive Bag 1000, Fort Nelson, B.C., (250) 263-6000.
- 10115-110th Avenue, Fort St. John, B.C., (250) 263-6000.

**Other than Normal Well Spacing**

Normal spacing requirements for oil and gas wells are defined within Sections 5 through 7 of DPR.

Other than normal spacing areas occur along the entire provincial boundary and along the boundary of the Peace River Block, (Township-Range survey system), where it adjoins the Petroleum and Natural Gas Grid system. Other than normal
spacing areas can also occur where active tenure was surrendered up to the boundary of a newly established park or protected area. They may also be established to manage resource production more equitably.

Horizontal wells with the productive interval open in two or more normal spacing areas, and not within an approved reservoir project (good engineering practice, pressure maintenance or unitized operation), must have an approved enlarged “other than normal” spacing area prior to production.

To space wells outside of the requirements, review the Other Than Normal Spacing Application Guideline and Information Letter EMD 00-09 Other Than Normal Spacing and Target Areas for Petroleum and Natural Gas Wells.

**Wells with Surface Casing Set Depth Less Than 600m**

Wells with a surface casing set depth less than 600 metres require a justification indicating how the base of useful ground water was determined and how the ground water will be protected. Justifications for the planned surface casing set depth can be submitted to the Commission via the Application Management System. For more information, refer to INDB 2016-09 Technical Guidance for Determining "Base of Usable Groundwater" on the Commission’s website.

An intermediate casing program can be used as a justification for a shallow set surface casing if the intermediate hole will be drilled with non-toxic drilling fluid and the intermediate casing is to be set deeper than 600 metres and cemented in full length.

**4.1.4 Well Specific Activity Requirements**

This section outlines requirements for well applications. Requirements are dependent on the characteristics of each well and are outlined in full details below including a description, details of additional information and requirements. In most cases, the details are input into the well application tab within AMS, but may require the upload of an attachment to support the details.
Attachments must meet specific size and file formatting restrictions in order to be uploaded correctly as defined in Section 5.8 of this manual.

Technical and engineering well details are required for each well and include surface hole details, bottom hole details, well classification, well type and well characteristics.

For well re-entry of an active or abandoned well the Engineering Data Sheet for Re-entry must be completed and submitted with application as an “Other Attachment”.

**Water Source Wells Requirements**

A water source well is defined in Petroleum and Natural Gas Act as:

- A hole in the ground drilled to obtain water for the purposes of injecting water into an underground formation in connection with the production of petroleum or natural gas.

A water source well permit is required before drilling or operating a water source well. Petroleum and natural gas titles are required for water source wells if petroleum or natural gas is produced. A water well drilled for the purpose of supplying water for drilling, camps, hydrostatic testing of pipelines, etc., does not classify as a “water source well” therefore does not require a well permit, but is regulated under the Water Sustainability Act.

All water source wells require well permits, however, companies wishing to explore for groundwater sources through test well drilling to depths of up to 300m on Crown land, may do so under an Investigative Use through an Associated Oil and Gas Activity application. Following test well drilling under an Investigative Use, a water source well permit under OGAA and authorization under the Water Sustainability Act are required before any test well can be used as a water source.

Groundwater test wells drilled to depths greater than 300m on Crown land, or to any depth on private land cannot be authorized under an Investigative Use.
Permit, and require direct application for a well permit. Investigative Use applications are discussed in more detail in Section 4.6 of this manual.

Applicants are encouraged to consult the Supplementary Information for Water Source Wells document available on the Commission’s website for additional information regarding drilling of test groundwater wells under an Investigative Use and description of operational requirements for water source wells.

**Groundwater Usage**

The use of groundwater is regulated under the Water Sustainability Act and requires a water authorization (licence or approval) from the BC Ministry of Forests, Lands and Natural Resource Operations & Rural Development (FLNRORD). Water licences are required to operate water source wells, unless they access “deep groundwater” as defined in the Water Sustainability Regulation. Consult the Commission’s Water Licence Application Manual.

Operators must comply with the Ministry of Environment’s Ground Water Protection Regulation and the Ministry of Health’s Protection Drinking Water Protection Act when using groundwater for camp water supply.

**Requirements for Fracturing Operations Less than 600m Below Ground**

The Drilling and Production Regulation states fracturing operations must not be conducted at a depth less than 600 metres below ground level unless the operations are permitted by the well permit. Fracture model simulation is required as part of the application if fracturing at depths shallower than 600 metres and must include a risk assessment for all potential impacts to usable groundwater resulting from the fracturing operations (where the “base of usable groundwater” is defined as per IB 2016-09). As a minimum, the fracture model simulation report must include:

- Fracture program design including proposed pumping rates, volumes, pressures, and fluids.
- Estimation of the maximum height and length of fracture propagation.
• Determination of the “base of usable groundwater” as per Information Bulletin 2016-09.

• Identification of water supply wells within 200 m of the proposed surface hole location and within 200 lateral metres of the surface trajectory of a horizontal or directional well. Include notification documentation of the water well owners of the proposed activity.

• Development of a groundwater monitoring program for the identified water supply wells that includes pre-drilling and post-fracture sampling of water wells where agreed to by the water well owners.

• Verification of cement integrity through available public data of all wells under the Commission’s jurisdiction within a 200 metre radius of the well to be fractured.

• Determination of bedrock depth.

• Assessment of the suitability and geological integrity of the candidate well for the proposed fracturing operations including casing and cement integrity.

Sour Well Formation Details

Applicants submitting a permit application for a well with an expected H₂S release rate greater than 0.01 m³/s, must provide additional information, including H₂S release rate rationale spreadsheet and emergency planning zone (EPZ) map. Sour well formation details include:

• All expected sour zones and the corresponding maximum H₂S content.

• Estimated H₂S release rates for drilling and completions in accordance with the CAPP H₂S Release Rate Assessment Guidelines.

• Distance to nearest occupied dwelling. In remote areas, it is acceptable to indicate the distance to the nearest occupied dwelling with a greater than symbol. For example, distance to nearest occupied dwelling: greater than 4.2 kilometres. The Commission does not require applicants to search a large radius to identify the nearest occupied residence. It is sufficient to ground truth the area out to the edge of the Emergency Awareness Zone (EAZ).

If the well is classified as a special sour well, the applicant must also submit a drilling plan. Drilling plan details include (but not limited to):
- Drilling fluid type.
- Underbalanced drilling (pressure in the well bore is lower than the fluid pressure in the formation).
- Managed pressure drilling information (an additive drilling process used to precisely control the annular pressure profile throughout the well bore).
- Sump information. A remote sump must be shown on construction plans.
- Geological information, including the extent and quality of offset data, a summary of offset hole problems and adverse drilling occurrences, an assessment of the possibility of encountering similar problems and occurrences at the proposed well, and how the problems and occurrences is dealt with.
- Description of the equipment used to drill the well including:
  1. Blowout preventer system, including a discussion as to whether blind shear rams is used and if not, an assessment or evaluation of the possible use.
  2. Drill pipe.
  3. Mud-gas separators.
  4. Drilling fluid system and equipment (type, density, quantity, hole volume, surface volume, stockpile supplies and availability, H₂S scavenger, mixing and pumping equipment).
  5. Wellhead (casing bowl, intermediate spool, valves) and casing (surface, intermediate, production).
- Description of the procedures to be followed in drilling the well including:
  1. Inspection and testing procedures ensuring all equipment is fully operational prior to the well reaching the critical depth and procedures to ensure a state of readiness is maintained.
  2. Procedures to ensure wellsite personnel are familiar with the drilling and emergency response plan, trained in the use of the drilling and safety equipment, and are proficient in blowout preventer and well control procedures.
  3. Procedures to ensure wellbore and casing integrity (directional survey, formation leak-off tests, casing pressure test, caliper logs).
Description of the monitoring of drilling and drilling fluid parameters to be installed ensuring drilling occurrences (kicks, lost circulation) or warning signs (drilling rate, torque, pump pressure, gas-cut mud) are promptly detected.

Information to confirm, prior to licensing sufficient well-site personnel are available and adequately trained and experienced for the drilling operation.

Special sour wells are classified by a combination of potential \( \text{H}_2\text{S} \) release rate and distance from an urban centre as outlined below. In addition, the Commission may classify a well as a special sour well based on the maximum potential \( \text{H}_2\text{S} \) release rate, population density, environment, sensitivity of the area and any expected complexities during the drilling phase.

<table>
<thead>
<tr>
<th>Potential ( \text{H}_2\text{S} ) Release Rate ((\text{m}^3/\text{s}))</th>
<th>Distance to Boundary of Urban Centre</th>
</tr>
</thead>
<tbody>
<tr>
<td>( 0.01 \leq \text{H}_2\text{S} &lt; 0.10 )</td>
<td>( \leq 500 \text{ metres} )</td>
</tr>
<tr>
<td>( 0.10 \leq \text{H}_2\text{S} &lt; 0.30 )</td>
<td>( \leq 1,500 \text{ metres} )</td>
</tr>
<tr>
<td>( 0.30 \leq \text{H}_2\text{S} &lt; 2.00 )</td>
<td>( \leq 5,000 \text{ metres} )</td>
</tr>
<tr>
<td>( \text{H}_2\text{S} \geq 2.00 )</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Requirements where applicant is not PNG rights tenure holder

According to Section 24.4 of OGAA, if the applicant is not the registered petroleum and natural gas rights holder for the target formation, an agreement between the applicant and the registered holder of the subsurface rights must be in place.

Applicants must adhere to the conditions of the PNG tenure and ensure any proposed applications are compliant with the tenure conditions set out under Section 72 of the PNG Act, if there are any.

If the PNG tenure includes any special conditions, known as caveats, the applicant must provide an explanation of the caveats in AMS. These caveats disclose information related to potential access restrictions that an applicant may adhere to and that the Commission may need to consider as part of the decision making process. Caveats may have been identified as part of the pre-tenure engagement referral process with another Ministry, local government and or First Nation.
Emergency Response Planning

An Emergency Response Plan (ERP), or an update to an existing plan, must be submitted to the Commission prior to commissioning a well, in accordance with Section 7 of the Emergency Management Regulation. Emergency planning zones are determined using H₂S content of product in a well or pipeline. Review Schedule A of the Emergency Management Regulation for more information.

4.1.5 Well Activity Submission: Data Field Completion

Table 4-B below provides detailed instructions for each of the data fields requiring input (not auto populated) within the Application Management System.

Table 4-B: Application Instruction Table for the Wells Overview and Wells Detail Tabs

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the activity within previously assessed construction corridor</td>
<td>Indicate if the proposed activity falls within a previously assessed review corridor or previously assessed construction corridor.</td>
</tr>
<tr>
<td>Activity Description</td>
<td>Provide a brief description of the project and any comments relevant to the well and/or application.</td>
</tr>
<tr>
<td>File XREF Number</td>
<td>Applicant's internal cross reference number.</td>
</tr>
<tr>
<td>Working Interest Partner (Optional):</td>
<td>Select the Working Interest Partner.</td>
</tr>
<tr>
<td>More Than One WIP</td>
<td>Check the box, if more than one Working Interest Partner.</td>
</tr>
<tr>
<td>PNG Tenure Rights ID</td>
<td>Enter the permit, drilling licence or lease number(s) for bottom and heel to toe locations.</td>
</tr>
<tr>
<td>Label</td>
<td>Instructions</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>Is there an agreement in place for those PNG tenures in which the proponent does not hold the PNG rights?</td>
<td>If the applicant is not the registered petroleum and natural gas rights holder, an agreement between the applicant and the registered holder of the subsurface rights is required.</td>
</tr>
<tr>
<td>Does the proposed application adhere to the conditions of the PNG tenure?</td>
<td>Indicate whether planned drilling and production is consistent with the conditions of the PNG tenure set out under Section 72 of the PNG Act, if there are any. If there are no conditions applied to the PNG tenure, indicate “Yes”.</td>
</tr>
<tr>
<td>Does the PNG tenure include caveats?</td>
<td>This refers to any caveats that were placed on the PNG tenure. These caveats disclose information related to potential access restrictions that an application may adhere to and that the Commission may need to consider as part of the decision making process. Caveats may have been indentified as part of the pre-tenure engagement referral process with another Ministry, local government and/or First Nation.</td>
</tr>
</tbody>
</table>

## COR Re-entry Details

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is re-entry required on COR’d well?</td>
<td>Indicate yes, if this application is for the re-entry of a well that has been issued a certificate of restoration. Active, abandoned or suspended well permits must apply to re-enter via the amendment process.</td>
</tr>
<tr>
<td>WA Number</td>
<td>Enter the original WA number of the well being re-entered.</td>
</tr>
<tr>
<td>Existing Total Depth (mKB)</td>
<td>Indicate the existing total maximum depth reached in the well in metres.</td>
</tr>
</tbody>
</table>

## Case Detail

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
</table>
| Grade | Enter API Grade in format:  
- Capital letters, dash, numbers (i.e. L-80; C-90).  
Enter Non-API Grade in format:  
- Capital letters and numbers, no dash (i.e. TN110SS, HCP110). |
| Re-Entry Summary | Provide the reason for re-entry and a description of the program summary. |
## Surface Hole Details

<table>
<thead>
<tr>
<th><strong>Primary or Subsequent Well</strong></th>
<th>The Primary well is the applicant's first well applied for on the wellsite application area. Subsequent wells are additional wells on the same wellsite area after the primary well has been applied for.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary WA Number</strong></td>
<td>Indicate the primary well authorization number. This is a mandatory field.</td>
</tr>
<tr>
<td><strong>Proposed Surface Hole DLS Location: LSD</strong></td>
<td>Enter Legal Subdivision (LSD) Value: 01 to 16.</td>
</tr>
<tr>
<td><strong>Proposed Surface Hole DLS Location: Section</strong></td>
<td>Enter Section Value: 01 to 36.</td>
</tr>
<tr>
<td><strong>Proposed Surface Hole DLS Location: Township</strong></td>
<td>Enter Township Value: 076 to 088.</td>
</tr>
<tr>
<td><strong>Proposed Surface Hole DLS Location: Range</strong></td>
<td>Enter Range Value: 13 to 26.</td>
</tr>
<tr>
<td><strong>Proposed Surface Hole NTS Location: Quarter Unit</strong></td>
<td>Enter Quadrant Unit Value: A to D.</td>
</tr>
<tr>
<td><strong>Proposed Surface Hole NTS Location: Unit</strong></td>
<td>Enter Map Unit Value: 001 to 100.</td>
</tr>
<tr>
<td><strong>Proposed Surface Hole NTS Location: Block</strong></td>
<td>Enter Map Block Value: A to L.</td>
</tr>
<tr>
<td><strong>Proposed Surface Hole NTS Location: Map</strong></td>
<td>Enter Mapsheet and Map Group Value in format XXX-X-XX. XXX = Mapsheet Value: 082, 083, 092, 093, 094, 095, 102, 103, 104, 114. X = Mapsheet Value: A to P. XX= Map Group Value: 01 to 16.</td>
</tr>
<tr>
<td><strong>Ground Elevation (m)</strong></td>
<td>Enter the ground elevation at well center.</td>
</tr>
<tr>
<td><strong>Well Classification</strong></td>
<td>Select the well classification as per the Drilling and Production Regulation.</td>
</tr>
<tr>
<td>-------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Innovative Technology Project</strong></td>
<td>The applicant must identify whether the project is within an area designated as a special project using innovative technology under OGAA Section 75 (1) or prescribed in s. 10 of the Oil and Gas Activities Act General Regulation.</td>
</tr>
<tr>
<td><strong>Approval Number</strong></td>
<td>Provide the approval number for the special project.</td>
</tr>
<tr>
<td><strong>Well Type</strong></td>
<td>Selected Well Type should reflect the expected operation of the well, i.e. if well will be utilized for &quot;Temporary Observation&quot; purpose during first 2 months following rig release, but will then be converted to &quot;Gas Production&quot;, Well Type should indicate &quot;Gas Production&quot;.</td>
</tr>
<tr>
<td><strong>Water Characteristics</strong></td>
<td>Select the water characteristics of the water source well.</td>
</tr>
<tr>
<td><strong>Reviewable Project by the Environmental Assessment Office</strong></td>
<td>Indicate yes, if review by the environmental assessment office is applicable.</td>
</tr>
</tbody>
</table>

### Bottom Hole Details

<p>| <strong>Will a New Bottom-hole Location be Drilled?</strong> | If a well has not been rig released, selecting “NO” will allow edits to the existing bottom-hole information but will not allow a new bottom-hole to be added. If a well has not been rig released, selecting “YES” will allow both edits to the existing bottom-hole information and a new bottom-hole to be added. If a well has been rig released, selecting “YES” will require a new bottom-hole to be added and the existing bottom-hole will be unavailable for edits. If a well has been rig released, selecting “NO” will allow only the Objective Formation and Objective Fluid to be edited and will not allow the addition of a new bottom-hole. |
| <strong>Well Profile</strong> | Select well profile: |
| | • Directional if the drill path has an inclination greater than 5 degrees for a min 150m measured depth. |
| | • Horizontal if the drill path has an inclination greater than 80 degrees for a min 100m measured depth. |
| | • Vertical if the drill path does not have an inclination greater than 5 degrees for a min 150m measure depth. |
| <strong>NTS/DLS Location</strong> | Enter the NTS or DLS location of the proposed bottom hole. |</p>
<table>
<thead>
<tr>
<th><strong>Expected Total Depth (m TVD)</strong></th>
<th>Enter the true vertical depth of the well in meters. True Vertical Depth is the vertical depth from the ground surface to the bottom-hole location of the well.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expected Total Depth (m MD)</strong></td>
<td>Enter the total measured depth of the well in meters. Measured depth is the length of the well bore measured along its actual course through the earth.</td>
</tr>
<tr>
<td><strong>Formation at Total Depth</strong></td>
<td>Select the name of the formation at total depth.</td>
</tr>
</tbody>
</table>
| **BOP Class** | Select the blow-out preventer class to be used. This is optional if the well type is a water source.  
  - True Vertical Depths (TVD) up to 1,800 meters require minimum class A.  
  - TVD between 1,800 and 3,000 meters require minimum class B.  
  - TVD between 3,000 – 5,500 meters require minimum class C.  
  - TVD over 5,500 meters require minimum class D.  
  - Select “Diverter” only for drilling a well with low risk of encountering hydrocarbon bearing formation.  
  - Select “Other” for a situation different from all listed above. |
| **Objective Formation** | Select the name of the objective formation. |
| **Objective Fluid** | Select the objective fluid (oil, gas or water) for the proposed well. |
| **Objective Depth (m TVD)** | Enter the true vertical depth at which the objective formation will be reached in metres. True Vertical Depth is the vertical depth from the ground surface to the depth where the formation will be reached. |
| **Objective Depth (m MD)** | Enter the measured depth at which the objective formation will be reached in meters. Measured depth is the length of the borehole, measured along its actual course through the earth. |
### Fracturing Details

<table>
<thead>
<tr>
<th>Fracturing Under 600 m</th>
<th>A fracturing operation must not be conducted at a depth less than 600 metres below ground level unless the operations are permitted by the well permit, in accordance with Section 21 of the Drilling and Production Regulation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Water Well within 1km: (Optional)</td>
<td>If fracturing under 600 metres, upload rationale and enter the water well ID of any existing water wells within one kilometre of the proposed well.</td>
</tr>
</tbody>
</table>

### Sour Well Formation H₂S Content Details

<table>
<thead>
<tr>
<th>Formation Name</th>
<th>Select the names of the expected H₂S formations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum H₂S Content (%)</td>
<td>Enter the maximum H₂S % concentration of the expected formation.</td>
</tr>
</tbody>
</table>

### Area Details

<table>
<thead>
<tr>
<th>Distance to Nearest Occupied Dwelling (km)</th>
<th>Indicate the distance in kilometres to the nearest occupied dwelling. Distances must be accurately measured if the occupied dwelling is located within a 2 kilometre radius from the proposed activity. In remote areas, it is acceptable to estimate the distance to the nearest occupied dwelling. The Commission does not require applicants to search a large radius to identify the nearest occupied residence. It is sufficient to ground truth the area out to the edge of the Emergency Awareness Zone (EAZ).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance to Nearest Urban Centre (km)</td>
<td>Indicate the distance in kilometres to the nearest occupied urban centre. An urban centre is defined as a city, town, village, summer village, hamlet with no less than 50 separate buildings, each of which must be an occupied dwelling. Also, any First Nation reserve, other incorporated centres and any similar development the Commission may designate as an urban centre.</td>
</tr>
<tr>
<td>Distance to Nearest Populated Area (km)</td>
<td>Indicate the distance to the nearest populated area, ie: occupied dwelling, school, picnic ground, or other place of concourse.</td>
</tr>
</tbody>
</table>

### H₂S Release Rate Details

| H₂S Rationale Document | H₂S Release Assessment Data Search and Analysis documents. |
## Critical Features within EPZ Details

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there critical features within the EPZ?</td>
<td>Are there any occupied dwellings, public facilities, places of business, numbered or named highways, parks or recreational sites, roads egress or trap lines inside the calculated Emergency Planning Zone (EPZ)?</td>
</tr>
<tr>
<td>Critical Feature Type</td>
<td>Indicate the following:</td>
</tr>
<tr>
<td></td>
<td>Numbered Highways - A major highway runs through the EPZ e.g. Alaska Highway, Highway 97, Heritage Highway, Highway 2, etc.</td>
</tr>
<tr>
<td></td>
<td>Roads Egress - There are residents who live on dead end roads, beyond the EPZ, who must egress through the EPZ.</td>
</tr>
<tr>
<td>Number within completion case EPZ</td>
<td>Includes the number of critical features within the effective EPZ.</td>
</tr>
</tbody>
</table>

## Special Sour Well Details

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does This Well Meet Criteria for a Special Sour Well?</td>
<td>Indicate Yes or No. The classification of special sour wells is based on two primary criteria; H₂S release rate potential and proximity to populated centers.</td>
</tr>
</tbody>
</table>

## Flaring

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective Formation</td>
<td>Select the formation for each objective formation where flaring may be required.</td>
</tr>
<tr>
<td>Maximum H₂S Concentration (%)</td>
<td>Indicate the expected maximum H₂S content for the objective formation.</td>
</tr>
<tr>
<td>Requested Volume</td>
<td>Indicate the amount of gas that the applicant would like to flare represented in 10⁶ m³ (thousand cubic metres).</td>
</tr>
<tr>
<td>Requested Volume Rationale</td>
<td>Rationale is required when the 'sum' of all formations exceeds the following thresholds for the proposed well classification:</td>
</tr>
<tr>
<td></td>
<td>• 400 10⁶ m³ for development wells.</td>
</tr>
<tr>
<td></td>
<td>• 600 10⁶ m³ for exploratory wells.</td>
</tr>
<tr>
<td>Flaring Description (optional)</td>
<td>Provide a description and/or justification in the space provided or upload the description and/or justification document by indicating yes below.</td>
</tr>
<tr>
<td>Flaring Description Attached</td>
<td>Indicate yes, to upload description and/or justification document.</td>
</tr>
</tbody>
</table>

**Exemption**

<table>
<thead>
<tr>
<th>Exemption Details</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flaring Description Attached</td>
<td>Indicate yes, to upload description and/or justification document.</td>
</tr>
<tr>
<td>Variance Explanation</td>
<td>Provide an explanation as to why a variance to well operational guidelines is required.</td>
</tr>
<tr>
<td>Does this application adhere to the Inline Testing Directive?</td>
<td>Inline testing is required for all new wells within 1.25 kilometres of a residence and 3.0 kilometres or less of a suitable pipeline.</td>
</tr>
<tr>
<td>Variance Explanation</td>
<td>Provide an explanation as to why a variance is required.</td>
</tr>
<tr>
<td>Exemption from Drilling and Production Regulation</td>
<td>Indicate if exemption from the Drilling and Production Regulation is required.</td>
</tr>
<tr>
<td>Exemption for</td>
<td>Enter the section of the regulation in which an exemption is required.</td>
</tr>
<tr>
<td>Exemption Explanation</td>
<td>Provide a detailed explanation / rationale for the regulatory exemption request. Include statements indicating why the regulation cannot be followed, proposed alternate strategies and mitigation.</td>
</tr>
</tbody>
</table>
4.2 Pipeline Activity Tab

Applicants applying for a pipeline permit must complete the pipeline activity tab in the Application Management System. The pipeline tab is made up of three components: pipeline overview; pipeline details including segment linkages; installation details and exemptions; and land details.

This section includes an overview of pipeline permitting, guidance regarding pipeline planning and design, details related to pipeline-specific application requirements and detailed instructions for completing the data fields within the pipeline tab.

Please Note:
This manual is written as a whole and available to industry in sections to allow permit holders to access activity chapters. It is prudent of the applicant to review the manual in its entirety and be aware of the content in other sections of the manual.

4.2.1 Pipelines Defined

Pipelines are an oil and gas activity as defined in OGAA as:

Piping through which any of the following is conveyed:

a) Petroleum or natural gas.

b) Water produced in relation to the production of petroleum or natural gas or conveyed to or from a facility for disposal into a pool or storage reservoir.
c) Solids.
d) Substances prescribed in Section 133(2)(v) of the Petroleum and Natural Gas Act.
e) Other prescribed substances.

And includes installations and facilities associated with the piping, but does not include:
f) Piping used to transmit natural gas at less than 700 kilopascals (kPa) to consumers by a gas utility as defined in the Gas Utility Act.
g) Well head.
h) Anything else prescribed.

Additionally, the following substances are prescribed in the OGAA General Regulation for the purposes of paragraph (e) above:

- Water or steam used for geothermal activities or oil and gas activities.
- Carbon dioxide.
- Liquid hydrocarbons.

And the following is prescribed for the purposes of paragraph (h) above

- Pipelines used in a gas distribution main, as defined in regulations under the Safety Standards Act.

In the field, pipelines encompass all piping from pig sending barrel to pig receiving barrel including all segments, risers, and appurtenances in between. For pipelines without pig barrels, the pipeline includes the last valve on the riser (or below ground valve), pump stations, line heaters, regulator stations, etc. prior to the facility tie-in. This transition may occur inside or outside the lease boundary.

Approved pipeline applications receive a permit under Section 25 of OGAA to construct and operate a pipeline. Pipeline permits expire where construction activities have not started within two (2) years of permit issuance. Unless expired,
the pipeline permit remains active until cancelled, suspended or declared spent, according to the provisions of OGAA.

**Temporary Above-ground Lines**

Temporary above-ground lines designed to transport fresh water are not within the definition of a pipeline; therefore a pipeline permit is not required. Temporary above-ground water lines are authorized by the Commission as associated oil and gas activity and require an applicable authorization. Associated oil and gas activities are detailed in Section 4.6 of this manual.

**Canadian Energy Regulator Pipelines**

In accordance with Sections 8 and 9 of OGAA, the Commission has limited authorities with respect to federally regulated pipelines. These authorities do not include the power to issue an approval for these pipelines; however, applications for the pipeline right-of-way, road right-of-way; as well as ancillaries including facilities are submitted through AMS.

CER related activities application guidance is under development. Contact the Authorizations Manager for the appropriate zone for assistance in preparing a CER-related activity application.

**Preliminary Plans and Fixing the Site of a Proposed Pipeline Route**

Under Section 23 of OGAA:

- Submitting a pipeline preliminary plan when preparing an application for a pipeline permit is optional. However, it is mandatory when entering land to conduct preliminary surveys or examinations, to fix the site of a proposed pipeline route.

Submission of a pipeline preliminary plan must include:

- Detail the proposed route, including a map of the proposed pipeline route at an appropriate scale:
  1. Base data.
2. Tenure holders.
3. Land parcels (legal land title).
4. Portions of private land under agreement.
5. Portions of private land without an agreement.
6. Portion of land on which activities are completed.

- Outline proposed portions on private land where the applicant has not been granted access and submit the prescribed security to the Commission to compensate the land owner or the Crown for any damage or disturbance possibly caused by fixing the site.

- Complete the required notifications.

Applicants should follow best management practices in addition to the regulatory requirements when following the preliminary plan process including:

- Immediately advise land owner when a situation requires the land owner’s attention.

- Immediately notify land owner of changes made in respect of the obligations in Section 15 of the Consultation and Notification Regulation.

- Consult land owner on preferred method of land access and only use motorized vehicles with the permission of the land owner.

- Ensure surveyors minimize the number of survey stakes used.

- Ensure surveyors only cut trees or branches in areas where growth is too dense for site lines.

- Ensure any trees or branches cut down are disposed of in a manner acceptable to the land owner.

- Ensure assessments are coordinated (for example, soil assessment with archaeology assessment) to avoid secondary intrusions.

- Provide the land owner with any soil assessment reports.
Additional Consultation and Notification Requirements: Notification Before Fixing the Site of a Pipeline

Notification requirements specific to fixing the site of a pipeline are indicated in Section 23 (3) of OGAA and Section 15 of the Consultation and Notification Regulation. This notification precedes the consultation and notification associated with the pipeline permit application.

A person is required to notify the land owner of the intent to enter onto the land owner’s property. The notice must include:

- Applicant name and contact name (person entering the land).
- Applicant contact information (or land agent representing the applicant) including contact name and phone number and email address.
- Preliminary plans under Section 23 (1) of OGAA.
- Description of the specific portion of the land to be surveyed or examined, and the activities to be undertaken for the purpose of fixing the site of the pipeline.
- Timelines and order in which proposed activities are carried out. For multi-well pads, include the entire schedule of activities over various years, where applicable.
- Statements advising the land owner of notification and consultation obligations if the company intends to submit an application for a pipeline permit on the land.

Applicants intending to enter on land in accordance with Section 23 (2) of OGAA must, provide notice to the land owner at least two (2) working days before entering the land.
4.2.2 Creating a New Pipeline Activity Application

**New Pipeline Applications**

A new pipeline permit is required for any new pipeline construction or operation, including pipelines constructed in existing right-of-way or over new Crown or private land. New pipeline segments can be added to an existing pipeline permit via an amendment application.

Pipelines can be applied for individually or with other oil and gas activities as part of a multi-activity project application. The system generates data input requirements for additional activities specified within the spatial data upload.

**Pipeline Permit Amendments**

Approval of a permit amendment application is required before the associated changes are carried out. Applications for amendments to pipeline permits are required if the permit holder plans to change the surface disturbance associated with the pipeline permit or the operating parameters of the pipeline. With respect to operating parameters, changes requiring an amendment to a pipeline permit include:

- Increase in maximum operating pressure.
- Splitting pipeline segments.
- A new pipeline segment to an existing pipeline permit.
- Modify pipeline, including installation of a liner within an existing pipe, installing a riser tree, altering the diameter of the pipe, and adding the following installations:
  1. Flare stack
  2. Generator
  3. Line heater
  4. Pump
  5. Regulator
  6. Riser
  7. Tank
8. Valve (pressure control or isolation)

- Repair and/or replace (not in-kind) is required if segments of pipeline are to be replaced with different pipe material. Changes in material are allowed up to one grade different and up to 10 per cent difference in wall thickness as long as the per cent stress at maximum operating pressure does not increase.

- A permit amendment is required, prior to a change of service, when planned or actual fluid composition of a pipeline is outside of the permitted parameters. Common examples of change of service fluid include increase or decrease of H₂S content of the fluid, change of the fluid type, and adding multiple product types.

  If the service fluid is seen to go out of specifications, the permit holders should ensure the fluid composition is within the parameters of any connected facility or pipeline until the permit amendment, for the change of service, is approved.

- Pipeline flow reversal, or change to bi-directional flow. The amendments do not constitute a change of service, only flow direction change. Amendments to adjoined facilities or facilities linkage changes may be required. Section 4.3 of this manual and the Oil and Gas Activity Operations Manual provides more information.

**Please Note:**

Changes which would normally be submitted as Notices of Intent or as Administrative Changes may be included in the scope of the amendment to avoid multiple submissions; however, amendment scope may not be included in Notices of Intent nor as Administrative Changes. More than one change to the permit may be included within the same amendment.

**Pipeline Integrity Works Applications**

Where in-stream works, temporary workspace or other authorizations are required to facilitate regular maintenance and integrity work for pipelines, permit holders are required to do the following:

1. Contact the appropriate Authorizations Manager at the Commission and notify them of the timing of submission and the risk ranking (based on risk rating criteria below) of the integrity works application.

2. Ensure that the application summary clearly identifies the application as
integrity work.

3. The application summary must include the level of urgency of proposed integrity works, ranked from 1 to 3 for risk to public safety and environment.

Risk Rating Levels:

- Level 1 - Investigative digs and planned maintenance: Where smart tool analysis or visual inspection has indicated an anomaly of some form and further investigation is required, or planned maintenance works (digs, pipeline replacements, depth of cover maintenance, etc.), that are part of planned infrastructure maintenance where no immediate threat to the environment or public safety is present.

- Level 2 - Known Risk: Where there is exposed pipeline or potential for pipeline integrity to be compromised.

- Level 3 – Emergency Works: Where pipeline integrity is compromised and the threat to the public or the environment is existing or imminent.

**Historical Submission: Pipeline**

A historical pipeline submission is intended to collect missing data including dates for NCS, NPT, LTO and as built information.

The historical pipeline submission is selected from the create “application type” menu as “historical submission”. It is often required when the pipeline is amended or when supporting documentation is required yet the details are either incomplete, absent or incorrect.

Historical pipeline applications pass fewer data validation checks upon submission. No fees are collected for an historical pipeline submission.

In order to complete a historical pipeline submission, AMS searches pipelines based on the applicant’s information including:

- Approval determination number.
- Legacy OGC File number.
- Authorized activity number (Pipeline project number).
Once the permit holder enters the historical activity description, AMS pre-populates the information fields based on the current information, where information exists. Complete and/or edit the activity details within the AMS tabs. Spatial data may be uploaded where it does not exist providing it meets the spatial data standards and the spatial data provides the physical location of the facility. Spatial data for historical submissions is optional.

4.2.3 Pipeline Planning and Design

This section provides typical planning and design requirements, guidelines and considerations when planning and designing a pipeline for an oil and gas activity application. The standards and guidelines presented here form a substantial basis for assembling an application. The Commission reviews the pipeline application relative to the engineering and technical information provided in AMS; therefore, applicants should review this section for an indication of any application requirements or attachments required in relation to the required components.

Regulatory Requirements

Pipelines must meet the design and operational requirements outlined in the Oil and Gas Activities Act (OGAA), the Pipeline Regulation and the Environmental Protection and Management Regulation (EPMR).

Of particular note, as required under Section 3 of the Pipeline Regulation:

- Every permit holder designing, constructing, operating, maintaining or abandoning pipeline infrastructure in British Columbia must follow the most current version of CSA Z662, including Annex N.

CSA Z662 is the standard developed and maintained by the Canadian Standards Association covering the design, construction, operation and maintenance of oil and gas industry pipeline systems conveying liquid hydrocarbons, oilfield water and/or steam, carbon dioxide, or gas. It is a legal requirement for operators to meet this standard for pipelines operating under OGAA in B.C.

If an exemption is requested from regulatory requirements, an exemption request must be prepared at the time of application and include:
• Specific regulatory provision requiring an exemption.
• Rationale for exemption (explanation of why an exemption is required).
• Proposed plan showing mitigation strategies to reduce impacts.

If exemptions are approved prior to the application, this approval must be attached to the application.

Guidance Requirements

In addition to this Oil and Gas Activity Application Manual and the CSA Z662 standard, pipeline activities should meet guidance recommendations in the following Commission documents:

• Oil and Gas Activity Operations Manual.
• Environmental Protection and Management Guideline.

If oil and gas activities cannot adhere to the guidance recommendation then justification must be included in the permit application. Include specifics of the guidelines not followed, an explanation of why they cannot be followed, proposed alternative and mitigation strategies.

Pipeline Integrity Management Programs (IMP)

In accordance with Section 7(1) of the Pipeline Regulation:

• A pipeline integrity management program must be prepared in compliance with CSA Z662 including Annex N.

Applicants must be aware of the legal requirements to meet this standard for pipelines operating under OGAA in B.C. and answer IMP-related questions in the pipeline permit application.
Damage Prevention Plans (DPP)

In accordance with Section 7(1) of the Pipeline Regulation:

- All pipeline permit holders must develop and implement a damage prevention plan and submit the program for review upon the Commission’s request. For a successful damage prevention plan, permit holders should review the British Columbia Common Ground Alliance’s Recommended Practice for Damage Prevention Programs.

Damage Prevention Programs are intended to reduce the frequency of preventable damage by addressing external/third-party threats to the integrity of pipeline infrastructure.

Surface and/or Subsurface Planning

Pipelines often require surface or subsurface corridors. Environmental considerations must go into planning a pipeline route including:

- Projects may require approval from the Environmental Assessment Office and timelines for approvals should factor into the application planning stages.

- Crossing plan drawings/diagrams should be prepared when crossing water, roads, rails and other utilities. Include a table of crossing type, typicals for all types of crossings and specific design drawings for any aerial crossings.

- Plot plans should be prepared showing the riser/pipeline starts and ends on a site and how it leaves the site going into the right-of-way. Risers associated with the pipeline require National Topographic Series (NTS) or Dominion Land Survey (DLS) co-ordinates for location confirmation. The locations must be filled out and indicated on the design schematics along with segment specification information. Include as part of the pipeline or amendment to the pipeline, even if it exceeds the width of the existing right-of-way.

- Geotechnical summary identifying geohazards along the pipeline route and mitigating strategies. This is a required document for all trenchless crossings.
4.2.4 Pipeline Specific Activity Requirements

This section outlines application requirements for pipeline applications. Requirements are dependent on the characteristics of the pipeline and are outlined in full details below including a description, details of additional information and requirements.

In addition to the pipeline project description, pipeline specific details are input into the pipeline application tab within the Application Management System and may require the upload of an attachment. Additional attachments may include (further described in this section):

- Engineering assessment.
- Piping and instrumentation diagram.
- Appurtenance design.
- Above ground pipeline protection and support drawings.
- Pressure control/overpressure protection.
- Proposed pressure test design.
- Leak detection design.
- Gas analysis for new sour pipelines.

Attachments must meet specific size and file formatting restrictions in order to be uploaded correctly as defined in Section 5.8 of this manual.

Technical and engineering pipeline details are required for all known design specifications for the pipeline, and the start and end points of the pipeline. The start and end points are not just from lease to lease, but the exact start and end point of the pipeline is required for all pipeline applications; this information is collected within the line data of the spatial data submission.

1. Engineering Assessment

Required engineering assessments outlined within CSA Z662 are detailed in Appendix A of this manual. Engineering assessments must be performed and documented to the standards outlined in the CSA Z662. The standards are
considered engineering documents. Section 20(9) of the Engineers and Geoscientists Act states the assessments must be sealed by a professional engineer licenced in the province of British Columbia.

2. **Piping and Instrumentation Diagram (P&ID)**

P&ID must be legible and identify each segment of pipe, including new pipe being built in existing right-of-ways in the project description and piping and instrumentation diagram. The minimum requirements for P&IDs are:

- All pipelines which are part of the permit are shown, including their connections (input and output).
- All segment breaks indicated and segments labelled (by project/segment if known, otherwise by OGC number if known, future input or other regulator if currently no OGC number or project number).
- Facility and pipeline breaks, if applicable, clearly indicated.
- Spec breaks and class location changes indicated.
- Valves, fittings, flanges, etc. shown.
- Risers indicated with locations.
- Flow direction indications/arrows.
- Any equipment or pressure control directly on the pipeline, including setpoints. (Note pressure control can be on the facility drawings, in which case a separate pressure control attachment can be provided).
- Pipeline fluid or fluids, maximum permitted H$_2$S and maximum operating pressure.
- Pipeline outside diameter (OD) and wall thickness (WT).
- Drawing cross-references. Indicate on the drawing the line continued on so it is traceable.
- Drawing number, revision number and date.

Riser locations or installations directly supporting the pipeline are considered part of the pipeline and should be included in the pipeline and instrumentation design. Installation types included on a pipeline application include:

- Pump
- Storage vessel/tank
4.2 Completing Activity Details: Pipeline Activity

- Regulator
- Riser
- Pressure control/pressure protection valves/devices
- Isolation valves showing the physical location. (If applicable, the distance between valves and relation to major water crossings is to be determined)
- Farm taps
- Line heater
- Flaring
- Generator

Anything directly supporting the pipeline is considered part of the pipeline. Installations not included in the list should be shown on the P&ID and may be included as part of the facility application.

3. Appurtenance Design

An appurtenance is an item that belongs to the pipeline, such as a riser, pig sender, pig receiver or pump stations. The appurtenance design may be shown as a table or schematic that includes all specifications, codes and or standards and appurtenance locations.

4. Above Ground Pipeline Protection and Support Drawings

Where the pipeline is installed above ground, provide documentation showing the additional measures taken to protect it from external interference, UV degradation and other possible failure modes. This is not applicable for typical surface piping on a riser site. For aerial crossings, provide documentation for the pipeline support structure.

5. Pressure Control/Overpressure Protection

Pressure control/overpressure protection must include the locations and set points of any devices protecting the line from possibly exceeding maximum operating pressure (MOP).
6. **Proposed Pressure Test Design**

Pressure test plans for hydraulic test plans must include the test medium, the minimum and maximum anticipated test pressure considering elevation differences, and the hold times. For pneumatic tests, this must include the procedures which are used at the site including all safety protocols. Pneumatic plans must also include a rationale for pneumatic testing.

7. **Leak Detection Design**

A description and/or drawings of the leak detection methodology is required for liquid hydrocarbon and optional otherwise.

8. **Gas Analysis**

Representative gas analysis and expected release volume, expressed at standard conditions of 15 degrees Celsius and 101.3 kPa, of hydrogen sulphide from the pipeline as required by the Pipeline Regulation.

### 4.2.5 Additional Considerations for Pipeline Activity

#### Emergency Response Planning

An Emergency Response Plan (ERP), or an update to an existing plan, must be submitted to the Commission prior to commissioning the pipeline (Leave To Open), in accordance with Section 7 of the Emergency Management Regulation. Emergency planning zones are determined using H₂S content of product in a pipeline. Review [Schedule A of the Emergency Management Regulation](#) for more information.

#### Please Note:

Applicants submitting an update to an existing Emergency Response Plan should include a statement identifying the existing plan.
Approval from Other Jurisdictions for Pipelines

The Commission may authorize a permit holder to construct a pipeline across, along, over or under any highway, road, public place, railway, underground communication or powerline, or another pipeline. Despite this permission, the permit holder may still require authorization for the use or occupation of land from the affected jurisdiction. Applicable legislation should be consulted.

BC One Call

Section 7 of the Pipeline Regulation states:

- A permit holder must not operate a pipeline approved by a permit unless the permit holder is a member of BC One Call. For more information on BC One Call, visit the BC One Call website.

4.2.6 Pipeline Activity Application Requirements: Data Field Completion

Table 4-C below provides detailed instructions for each of the data fields requiring input (not auto populated) within the Application Management System.

Table 4-C: Application Instruction Table for the Pipeline Tab

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the activity within a previously assessed construction corridor?</td>
<td>Indicate if the proposed activity falls within a previously assessed review corridor or previously assessed construction corridor.</td>
</tr>
<tr>
<td>Activity Description</td>
<td>(Optional) Provide a brief description of the project and any comments relevant to the pipeline application.</td>
</tr>
<tr>
<td>Piping and Instrumentation Diagram Attached</td>
<td>Upload Piping and Instrumentation Diagrams.</td>
</tr>
</tbody>
</table>
### Pipeline Specifications Tab

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The pipeline meets all current</td>
<td>Indicate yes, if pipeline meets all CSA Z662 standards. If no,</td>
</tr>
<tr>
<td>applicable CSA Z662 standards</td>
<td>then upload engineering assessment.</td>
</tr>
<tr>
<td>Segment Details</td>
<td></td>
</tr>
<tr>
<td>CSA Class Location</td>
<td>Select the highest class location as defined by CSA standards for this</td>
</tr>
<tr>
<td></td>
<td>segment.</td>
</tr>
<tr>
<td>Physical Pipe Length (m)</td>
<td>The pipe length to be reported is the actual pipeline length (not the</td>
</tr>
<tr>
<td></td>
<td>surface land length).</td>
</tr>
<tr>
<td>Proposed DLS Location: LSD</td>
<td>Enter Legal Subdivision (LSD) Value: 01 to 16.</td>
</tr>
<tr>
<td>Proposed DLS Location: Section</td>
<td>Enter Section Value: 01 to 36.</td>
</tr>
<tr>
<td>Proposed DLS Location: Township</td>
<td>Enter Township Value: 076 to 088.</td>
</tr>
<tr>
<td>Proposed DLS Location: Range</td>
<td>Enter Range Value: 13 to 26.</td>
</tr>
<tr>
<td>Proposed NTS Location: Quarter</td>
<td>Enter Quadrant Unit Value: A to D.</td>
</tr>
<tr>
<td>Unit</td>
<td></td>
</tr>
<tr>
<td>Proposed NTS Location: Unit</td>
<td>Enter Map Unit Value: 001 to 100.</td>
</tr>
<tr>
<td>Proposed NTS Location: Block</td>
<td>Enter Map Block Value: A to L.</td>
</tr>
<tr>
<td>Proposed NTS Location: Map</td>
<td>Enter Mapsheet and Map Group Value in format XXX-X-XX. XXX = Mapsheet Value:</td>
</tr>
<tr>
<td></td>
<td>082, 083, 092, 093, 094, 095, 102, 103, 104, 114. X = Mapsheet Value: A to</td>
</tr>
<tr>
<td></td>
<td>P. XX= Map Group Value: 01 to 16.</td>
</tr>
<tr>
<td>Pipeline Product</td>
<td>Information in regards to fluid types/pipeline product must be</td>
</tr>
<tr>
<td></td>
<td>entered for each segment. Any line with a partial pressure of H₂S</td>
</tr>
<tr>
<td></td>
<td>greater than 0.3kPa, must be listed as sour product.</td>
</tr>
<tr>
<td>H₂S (mol %) (highest)</td>
<td>Indicate anticipated H₂S content by mole per cent.</td>
</tr>
<tr>
<td>CO₂ (mol %) (highest)</td>
<td>Indicate anticipated CO₂ content by mole per cent.</td>
</tr>
<tr>
<td>Pipe Outer Diameter (mm)</td>
<td>Indicate the pipe outer diameter in millimetres.</td>
</tr>
<tr>
<td>Thinnest Wall Thickness</td>
<td>Indicate the thinnest wall thickness included in the pipeline design.</td>
</tr>
<tr>
<td>Material Type</td>
<td>Select the pipe material type included in the pipeline design.</td>
</tr>
<tr>
<td><strong>Material Standard</strong></td>
<td>Select the pipe material standard applicable to the pipeline design.</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Material Grade</strong></td>
<td>Select the pipe material grade included in the pipeline design.</td>
</tr>
<tr>
<td><strong>Design Pressure (kPa)</strong></td>
<td>Indicate the Design Pressure in kilopascals.</td>
</tr>
<tr>
<td><strong>Minimum Cover Depth (m)</strong></td>
<td>Indicate the Cover Depth in metres.</td>
</tr>
<tr>
<td><strong>Maximum Operating Pressure (kPa)</strong></td>
<td>Indicate the maximum operating pressure in kilopascals.</td>
</tr>
<tr>
<td><strong>Internal Coating</strong></td>
<td>Select the type of internal pipeline coating used in the pipeline design.</td>
</tr>
<tr>
<td><strong>Internal Coating Description</strong></td>
<td>Provide any applicable description of the internal coating included in the pipeline design.</td>
</tr>
<tr>
<td><strong>External Coating</strong></td>
<td>Select the type of external pipeline coating used in the pipeline design.</td>
</tr>
<tr>
<td><strong>External Coating Description</strong></td>
<td>Provide any applicable description of the external coating included in the pipeline design.</td>
</tr>
<tr>
<td><strong>Flow Direction</strong></td>
<td>Indicate if the pipeline was designed for uni-directional flow or bi-directional flow.</td>
</tr>
<tr>
<td><strong>Twinned Within Segment Indicator</strong></td>
<td>Indicate if the segment is twinned; (Twinned for this purpose is defined as two onshore Class C pipelines of 50 kilometers or more in length being constructed at the same time and carrying the same type of fluid).</td>
</tr>
</tbody>
</table>

**Segment Linkage Details: Input Linkage**

<table>
<thead>
<tr>
<th><strong>Input Linkage</strong></th>
<th>Upstream Facility ID or pipeline project number which the segment is physically connected to.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Facility ID</strong></td>
<td>Enter the Facility ID, if the pipeline segment is physically connected to a facility.</td>
</tr>
<tr>
<td><strong>Project Number</strong></td>
<td>Enter the project number, if the pipeline segment is physically connected to a pipeline.</td>
</tr>
<tr>
<td><strong>Segment Number</strong></td>
<td>Enter the segment number of the project which the pipeline segment is physically connected to.</td>
</tr>
</tbody>
</table>
### Segment Linkage Details: Output Linkage

<table>
<thead>
<tr>
<th>Output Linkage</th>
<th>Downstream Facility ID or pipeline project number which the segment is physically connected to.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility ID</td>
<td>Enter the Facility ID, if the pipeline segment is physically connected to a facility.</td>
</tr>
<tr>
<td>Project Number</td>
<td>Enter the project number, if the pipeline segment is physically connected to a pipeline.</td>
</tr>
<tr>
<td>Segment Number</td>
<td>Enter the segment number of the project which the pipeline segment is physically connected to.</td>
</tr>
</tbody>
</table>

### Pipeline Installation Details

#### Farm Tap

<table>
<thead>
<tr>
<th>Pipe OD (mm)</th>
<th>Written permission is required from a pipeline engineer if it is more than 35mm.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pipe length (m)</td>
<td>Written permission is required from a pipeline engineer if it is more than 50m.</td>
</tr>
<tr>
<td>911 Location</td>
<td>Indicate the address.</td>
</tr>
</tbody>
</table>

#### Flaring

Proponents must enter the location. No other information is required in AMS.

#### Generator

<table>
<thead>
<tr>
<th>Power (KW)</th>
<th>Indicate the generator power in KW.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel consumption (BTU)</td>
<td>Indicate the fuel consumption in BTU.</td>
</tr>
<tr>
<td>Prime Mover Type</td>
<td>Update if the prime mover is powered by electric, gas, or liquid fuel.</td>
</tr>
</tbody>
</table>

#### Line Heater

<table>
<thead>
<tr>
<th>Output (BTU)/hr</th>
<th>Output Measurement = 1,000BTU/hr.</th>
</tr>
</thead>
</table>

#### Pump

<table>
<thead>
<tr>
<th>Purpose/Use</th>
<th>Provide a description for the purpose of the pump.</th>
</tr>
</thead>
</table>

#### Riser

<table>
<thead>
<tr>
<th>Vents Indicator</th>
<th>Indicate if the riser installation will include vents.</th>
</tr>
</thead>
</table>
### Pigging Indicator
Indicate if the riser installation will include pigging equipment.

### Regulator

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Input Pressure (kPa)</td>
<td>Contact the Engineering Department in Kelowna if Maximum Input Pressure exceeds the number of digits allowable in AMS.</td>
</tr>
<tr>
<td>Maximum Output Pressure (kPa)</td>
<td>Contact the Engineering Department in Kelowna if Maximum Input Pressure exceeds the number of digits allowable in AMS.</td>
</tr>
</tbody>
</table>

### Tank

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>Indicate the product type: chemical or fuel (Diesel or Propane).</td>
</tr>
<tr>
<td>Total capacity (m³)</td>
<td>Enter the capacity of the tank in m³.</td>
</tr>
</tbody>
</table>

### Valve

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size (mm)</td>
<td>Indicate the valve size in mm.</td>
</tr>
<tr>
<td>Type</td>
<td>Indicate if the valve is used for isolation or pressure protection.</td>
</tr>
<tr>
<td>Activation</td>
<td>Indicate if the activation is manual or automated.</td>
</tr>
</tbody>
</table>

### Exemptions

<table>
<thead>
<tr>
<th>Exemption from Pipeline Regulation</th>
<th>Indicate if an exemption from the Pipeline Regulation is being requested.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exemption from:</td>
<td>Enter the section of the Regulation that is the subject of the exemption request.</td>
</tr>
<tr>
<td>Exemption Explanation</td>
<td>Provide a detailed explanation / rationale for the regulatory exemption request. Include statements indicating why the regulation cannot be followed and proposed alternate strategies and mitigation.</td>
</tr>
<tr>
<td>Exemption from Liquefied Natural Gas Facility Regulation Indicator</td>
<td>Indicate if an exemption from the Liquefied Natural Gas Facility Regulation is being requested.</td>
</tr>
<tr>
<td>Exemption from:</td>
<td>Enter the section of the Regulation that is the subject of the exemption request.</td>
</tr>
<tr>
<td>Exemption Explanation</td>
<td>Provide a detailed explanation / rationale for the regulatory exemption request. Include statements indicating why the regulation cannot be followed, proposed alternate strategies and mitigation.</td>
</tr>
</tbody>
</table>
4.3 Facility Activity Tab

Applicants applying for a facility permit must complete the facility application tab in the Application Management System. The facility tab is made up of three components: facility overview; facility details including equipment details, technical specifications and exemptions; and land details.

This section includes an overview of facility permitting, guidance regarding facility planning and design, details related to facility-specific application requirements and detailed instructions for completing the data fields within the facility tab.

Please Note:

This manual is written as a whole and provided to industry in sections to allow permit holders to access activity chapters. It is prudent of the permit holder to review the manual in its entirety and be aware of the content in other sections of the manual.

4.3.1 Facility Permitting Defined

Facilities are an oil and gas activity, and are defined in OGAA as:

- A system of vessels, piping, valves, tanks and other equipment used to gather, process, measure, store or dispose of petroleum, natural gas, water or a substance referred to in paragraph (d) or (e) of the definition of pipeline.
Approved oil and gas applications receive a permit under Section 25 of OGAA to carry out construction and operations pertinent to the activity. The permit expires where construction activities have not started within two (2) years of permit issuance. Unless expired, the permit remains active until cancelled, suspended or declared spent, according to the provisions of OGAA.

**Facility Types**

Applicants must apply for a specific type of facility. The appropriate facility type must be selected in the facility details component of the facility tab in the Application Management System. Facility types include (and are further defined in the Commission’s glossary):

- Battery site
- Disposal station
- Gas sales meter
- Oil sales meter
- Tank terminal
- Pump station
- Compressor Dehydrator
- Gas dehydrator
- Injection station
- Processing battery
- Water hub
- NGL fractionation facility
- Compressor station
- Gas processing plant
- LNG facility
- Satellite battery
- Well facility

Facilities and operational equipment required in oil and gas activities, whether temporary or permanent require a facility permit. The facility application tab in AMS is used for all facility applications, whether within an existing right-of-way, wellsite or over new Crown land or private land.

**Liquefied Natural Gas and Gas Processing Plants**

Liquefied Natural Gas (LNG) facilities, oil refineries and gas processing plants are considered facilities under OGAA. New plant or refinery applications are...
Facility Numbering

Upon issuance of a facility permit, the Commission’s information systems will assign a facility identification number (FACID) to the facility. The codes are used to track facilities and associated operational submissions in the Commission’s KERMIT information system.

4.3.2 Creating a New Facility Activity Application

New Facility Application

A new facility application is submitted to obtain a facility permit on either a new well/facility area or on a previously permissioned well/facility area. A permit is required prior to any construction or installation of equipment and flow of product.

Facilities can be applied for individually or with other oil and gas activities as part of a multi-activity project application. The AMS generates data input requirements for additional activities specified within the spatial data upload.

Facility Permit Amendments

An amendment must be used for modifications beyond what is authorized in the permit and is required for activities where work initiates or impacts measurements or noise/air emissions. Examples where a permit amendment is required include:

- The addition of equipment for a new well tie-in and for newly completed wells at a permitted facility,
- The addition of any equipment listed in AMS under the Facilities Details tab (please refer to Appendix C of this Manual for a more specific list),
- Modifying details initiating or impacting measurement related to production accounting,
- Addition of storage, including temporary or permanent production tanks (oil, water, emulsion or condensate) located on private or Crown land,
• Adding or removing artificial lift systems such as: pump jacks, gas lifts, progressive cavity pumps, electric submersible pump or other hydraulic pumping units. A plunger lift addition does not require an amendment.

• Repairing or modifying equipment including:
  1. Replacing equipment where additional regulatory considerations may be required (e.g. replacing with a larger unit that may consequentially increase processing capacity or waste discharge),
  2. Increasing the permitted H₂S concentration,
  3. Increasing the inlet capacity of a gas plant,

• Modifying an aspect of the facility outside the limits of the permissions and authorizations of the permit (such as increases in flare limits).

Removal of equipment that will result in a change to facility type must be submitted as an amendment application for to change the facility type. Please note that well facilities cannot be amended to other facility types; an application for a new facility on permissioned land is required in these cases.

Appendix C provides a comprehensive list of facility changes requiring a facility permit amendment. Appendix D includes examples of changes that can be made under the existing permit without submission of amendment applications, NOI or updated as-built record drawings.

Please Note:

Drawings included with amendment applications must include clouded areas to indicate amended areas.

Notice of Intent to Remove All Equipment from a Site

When a permit holder has removed all the equipment from a facility site, they must submit a Notice of Intent (NOI). A project description and documentation of proof must be submitted to the Commission which should clearly identify all facility equipment and piping that was removed. The documentation of proof could include pictures of the location showing the equipment has been removed or a signed confirmation from the contractor that completed the removal. The
Commission’s Oil and Gas Activity Operations Manual provides more information on Notice of Intent submissions.

**Notice of Intent to Suspend a Gas Plant or Other Facility**

Suspension of a facility must be carried out in accordance with Section 79 of the Drilling and Production Regulation and notice submitted via a Notice of Intent (NOI). The Commission’s Oil and Gas Activity Operations Manual provides more information on Notice of Intent submissions.

**Facility Permit Amendment for Change of Service**

A change of service typically applies to both a facility and a pipeline and requires that each be amended under the permit in which they were originally issued. If the change of service includes a pipeline that was not originally approved in the same permit as the facility, the permit number for the pipeline must be entered in the description box in the facility amendment.

If a product is introduced into a facility or pipeline that was not originally designed for sour service, an Engineering Assessment, in accordance with the latest edition of CSA Z662, must be completed and attached to the amendment application. A facility permit amendment is also required to increase the permitted H2S concentration of a facility.

For changes in service at a facility to decrease H2S concentration, a Notice of Intent (modify equipment or facility) may be appropriate depending on the limitations of the permit permissions. The Commission’s Oil and Gas Activity Operations Manual provides more information on Notice of Intent submissions.

**Historical Submission: Facility**

The historical facility submission is intended to collect missing data into KERMIT. This includes equipment and compressor details that were not required at the time the facility was originally permitted.
The historical facility entry submission is selected from the create “application type” menu as “historical submission”. It is often required when the facility has incomplete, absent or incorrect data.

Historical facility submissions pass fewer data validation checks upon submission. No fees are collected for an historical facility submission.

In order to complete a historical facility submission AMS searches facilities approved prior to October 4, 2010 based on the permit holder’s information including:

- Approval determination number.
- Legacy OGC File number.
- Authorized activity number (Facility ID#).

Once the permit holder enters the historical activity description, AMS pre-populates the information fields based on the current information; where available. Complete and/or edit the activity details within the AMS tabs. Spatial data may be uploaded where it does not exist providing it meets the spatial data standards and the spatial data provides the physical location of the facility. Spatial data for historical submission is optional.

### 4.3.3 Facility Planning and Design

This section provides typical planning and design requirements, guidelines and considerations when planning and designing a facility for an oil and gas activity application. The standards and guidelines presented here form a substantial basis for assembling an application. The Commission reviews the facility application relative to the engineering and technical information provided in the Application Management System; therefore, applicants should review this section for an indication of any application requirements or attachments required in relation to the required components.
4.3|Completing Activity Details: Facility Activity

Regulatory Requirements

Facilities must meet the design and operational requirements outlined in the Oil and Gas Activities Act (OGAA), Oil and Gas Waste Regulation (OGWR), Drilling and Production Regulation (DPR), or the Liquefied Natural Gas Facility Regulation (LNGFR), as applicable, and the Environmental Protection and Management Regulation (EPMR).

If an exemption is requested from regulatory requirements, an exemption request may be submitted prior to application submission, at the time of application, or following application determination, depending on the specifics of the circumstance, and the regulatory requirements from which exemption is being requested. Exemption requests must include:

- Specific regulatory provision requiring an exemption.
- Rationale for exemption (explanation of why an exemption may be required).
- Proposed plan showing mitigation strategies to reduce associated impacts relative to the feature that the regulatory provision addresses.

If exemptions are approved prior to the application, this approval must be attached to the application.

Guidance Requirements

In addition to this Oil and Gas Activity Application Manual and CSA Z276, CSA Z662 and ASME B31.3 standards, facility activities should be designed to meet guidance recommendations in the following Commission documents:

- Measurement Requirements for Upstream Oil and Gas Operations manual.
- Flaring and Venting Reduction Guideline.

If oil and gas activities cannot adhere to the guidance recommendation then justification must be included in the permit application. Include specifics of the guidelines not followed or met, an explanation of why they cannot be followed or met, the alternative proposed plan and any relevant mitigation strategies.
Safety Standards Amendment Act: Regulatory Authority and Process Changes

The Safety Standards Amendment Act came into force on November 7, 2016, and has resulted in changes to the administration of regulatory authority and processes by the Commission and Technical Safety BC.

The Commission and Technical Safety BC have a revised MOU in place. Please refer to Bulletin 2016-34 for guidance.

All permit holders of Commission regulated facilities must prepare, regularly update as required, and keep on file the following documentation. These management systems and processes are to be followed in the design, construction, operation, maintenance, and decommissioning of facilities in the province of British Columbia for the particular permit holder. The submission of this information is NOT required in a permit application package, but must be available upon request, or for audit purposes.

1. Permit holders must have the following in place prior to the start-up of new or modified facilities:

   a. a report from a qualified professional confirming that all of the elements of a quality assurance/quality control process necessary for construction are documented and applicable to the scope of work. The scope of validation should include at a minimum:

      i. quality planning, control, assurance and continuous improvement processes;

      ii. a full explanation of how the quality objectives will be managed for the duration of the construction including those for the subcontractors and/or the suppliers;

      iii. details regarding how the plan addresses the project quality policy and objectives, quality organization, resource management, information management, codes, standards and specifications, management of change, control of deviations and concessions, and regulatory legislation compliance; and,
iv. a plan to verify of the effectiveness of the quality assurance program during design, construction and testing.

b. a written description of the management of change process that will be used by the permit holder in the design, construction, and operation of the facility. The management of change system should:

   i. include written procedures for managing change;
   ii. address the basis for each change;
   iii. evaluate potential safety, health and environmental impacts for each change;
   iv. define requirements for authorizing changes to be made; and,
   v. include methods by which the permit holder will appropriately inform and train affected workers before changes occur.

The Center for Chemical Process Safety Guidelines for Management of Change for Process Safety identifies key components of what would be an acceptable change management system to the Commission.

c. a Facility Integrity Management Program in accordance with s. 78.1 of the Drilling and Production Regulation.

2. In lieu of Pressure Piping Registration for ASME B31.3 facility piping that was previously under Technical Safety BC jurisdiction, permit holders must have the following in place prior to the start-up of new or modified facilities:

   a. P&IDs that include the following information:

      i. Number and revision
      ii. Design code of construction information
      iii. Line identification list showing maximum design pressures, maximum and minimum design temperatures, and pipe specifications including:

         • Fluid service
         • Dimensions
         • ASME material specifications
4.3 Completing Activity Details: Facility Activity

- Flange, valve and fitting standards
- Heat treatment
- Non-destructive examination requirements
- Corrosion allowance
- Impact testing
- Pressure test conditions and fluid
- Formulas used or reference to code section

b. Stress analysis calculations demonstrating the piping system can withstand or is isolated from all ambient influences, dynamic effects, weight effects, and interface loads, as defined in ASME B31-series code. If these conditions are unknown, clearly stated worst-case loading restrictions shall be included.

Liquefied Natural Gas (LNG)

Applicants planning to construct and operate a Liquefied Natural Gas facility (LNG facility) in British Columbia should review the Liquefied Natural Gas Facility Application and Operations Manual. Operators must be familiar with the requirements and procedures for applying and obtaining a permit to construct and operate an LNG facility. Permit holders must follow key regulatory milestones and requirements during the facility’s construction, operations and site restoration phases.

Gas Processing Plants

Before submitting an application for a gas processing plant(s), applicants are encouraged to meet with the Commission and allow sufficient time for application processing based on the specifics of the proposal. The Commission has defined a process where one or more meetings may be necessary as part of application review and determination. This process includes:

- Submission of a brief written description of the project scope, including sketches of the proposed tentative gathering/processing system and sales tie-in points. Timing for this should be a week prior to the pre-application meeting to allow more meaningful feedback to assist in the preparation of the application. The submission should be directed to OGCPipelines.facilities@bcogc.ca,
- Pre-application meeting with key Commission staff, and,
- Mid-process meeting to discuss Commission application reviewed feedback. This meeting is arranged on a case by case basis only when written communication isn’t sufficient to answer regulatory questions.

**Gas Plant Proliferation Analysis**

A gas processing plant proliferation review must be included with the application and must contain the rationale for constructing the newly proposed plant after consideration of existing active plants and pipeline infrastructure feeding into active plants within a 50 km radius. This is required as an attachment with the application for new plants and amendments that increase the throughput of the plant. Other plant amendments do not require a proliferation review.

**Flare and Incinerator Systems**

Flare and incinerator systems must be designed and operated within the limits specified by a qualified professional. Applicants should seek guidance on flare system design from the following regulations and guides:

- API Standard 521.
- **Flaring and Venting Reduction Guideline.**
- **Drilling and Production Regulation** (DPR):
  1. Section 47 (c) and (h)
  2. Section 44 (a), (b), (c), (d) and (e)
  3. Section 42 (1) and (5)
  4. Section 43 (1), (2) and (3)
- **Oil and Gas Activity Operations Manual**
  1. Section 9.6.15

The Commission considers uninterrupted flared volumes with a constant and visible flame under routine operations to be “continuous”. This includes fuel gas being burned to maintain a pilot and / or continuous purge in the flare header.
4.3 Completing Activity Details: Facility Activity

Fugitive Emissions

A Fugitive Emissions Management Program must be in place prior to commencement of operations at a facility. The Commission may request this program at any time in the application, construction or operations phase of a facility. Refer to the CAPP Best Management Practice for Fugitive Emissions Management document for further guidance.

Leak Detection

Leak detection system with adequate controls must be in place according to Section 39 of the Drilling and Production Regulation. The Commission may require additional levels of detection and control based on the location and specifics of a facility installation. Examples of common leak detection and control include high/low pressure alarms/shutdown, H₂S/LEL/fire detection, ESDV, etc.

Overpressure Protection

Overpressure protection must be designed and operated according to CSA Z662 and/or ASME B31.3. The Commission may require additional levels of detection and control based on the location and specifics of a facility installation.

Secondary Containment

All produced oil, water and condensate storage (production) tanks as outlined in Section 50 of the DPR have secondary containment requirements.

On a case-by-case basis, there is an option for produced water tanks to utilize a double wall design in place of a dyke or berm for secondary containment.

- The double wall design option must include a secondary tank system capable of holding 110 per cent of the primary tank’s volume where the space between the tanks has a level indicator and high-level shutdown.
- The main tank must have a high-level shutdown.

The Commission has established standards for secondary containment for above-ground tanks storing fluids not produced from an oil, gas or water well. Installations adhering to the standards detailed below will meet regulatory requirements for secondary containment, as per the Drilling and Production Regulation, Section 50 (1) and (2), the most recent version of CSA Z662 and the
most recent version of the National Fire Protection Association (NFPA) Code Section 30, (specifically, but not limited to NFPA 30, Chapter 1, section 1.4.2).

The minimum requirements for secondary containment of non-production tanks include:

- Tanks greater than 45 gallons (one barrel) and less than 12,000 gallons (U.S. gallon), 45,400 litres or 45.4 m³, storing chemicals, fuel or other products, for example, methanol and corrosion inhibitor, on a wellsite or facility site, will meet the standard for secondary containment with a double-walled tank design.

- The installation of a single-walled tank design with a catch-bin for containment or a dyke, as long as the capacity provides for 110 per cent of the tank volume.

- Tanks less than 45 gallons do not require secondary containment and tanks greater than 12,000 gallons (U.S. gallon), 45,400 litres or 45.4 m³, require dyking or berming to contain an unexpected release of fluid.

Barrels containing non-production fluids such as chemicals (glycol, amine, corrosion inhibitor, etc.); fuel for gensets or helicopters; oil (lube, engine crankcase) for compressors, one or more barrels can be stored at a location without secondary containment as long as the barrels are located in a manner where a spill would be contained within the facility area, and the spilled fluid would be contained in an area free of hazards such as away from a source of ignition. For production tanks in a tank farm, NFPA 30 requires the dyke / berm secondary containment to be sized for the containment of the full volume of the largest tank only. The requirement for barrel docks are described in NFPA 30.

Typical pop tank installations do not require secondary containment, as long as the facility site is constructed to contain all on-site fluid storage volumes and surface run-off. Where a pop tank is being used as both a drain tank and for emergency PSV fluid carry-over capture, secondary containment is required.

**Truck Out Boxes**

Truck out boxes are considered spill or leak prevention devices, not secondary containment. As a best practice, the Commission recommends the boxes are installed inside the tank’s secondary containment boundary. Any deviation from
this design must achieve the same results, and is considered on a case by case basis. The design should be configured to enable the truck operator to remain outside the secondary containment area while loading and unloading the fluid.

Truck out boxes should be reflected on the drawings relative to the tank’s secondary containment boundary as follows:

- By showing the location of the truck out boxes on the Plot Plan, PFD or P&ID, and/or
- By inserting a note on the drawings stating the location of the truck out boxes.

Petroleum Storage Tank Design

The general standards for atmospheric and low-pressure petroleum storage tanks in B.C. are included in the following American Petroleum Institute (API) documents:

- **API-650** Welded Steel Tanks for Oil Storage: governs the construction of tanks storing products with internal pressures of up to 2.5 psig.
- **API-651** Cathodic Protection for Above-Ground Petroleum Storage Tanks.
- **API-652** Lining of Above-Ground Petroleum Storage Tanks.
- **API-653** Tank Inspection, Repair, Alteration, and Reconstruction.
- **API-620** Design and Construction of Large Welded Low-Pressure Storage Tanks: construction of tanks with internal pressures of up to 15 psig.
- **API-2000** Venting Atmospheric and Low-Pressure Storage Tanks.
- **API-2350** Overfill Protection for Petroleum Storage Tanks.
- **API-2015** Cleaning Petroleum Storage Tanks.
- **API-2550** Measurements and Calibration of Petroleum Storage Tanks.

For general requirements on underground tank inspections and abandonment, refer to CSA Z662, API-1604 and NFPA 30.
Water Storage at Facility Sites

Water storage sites, or pits, constructed at and to be used at facility sites (or pits), for reclaimed, blended, or produced water, including frac flow back water, are part of the facility permit application or amendment process. A water storage pit for produced water can be added to an existing facility via permit amendment to add storage equipment. Stand-alone produced water pits and associated equipment should be applied for with the application code ‘Water Hub’.

If the water storage pit will store only fresh water (fresh water storage site), an application for an associated oil and gas activity can be submitted, as described in Section 4.6 of this manual. Fresh water storage sites may also be subject to authorizations under the Water Sustainability Act and Dam Safety Regulation.

Light Control

The Commission requires that operations at a well or facility do not cause excessive emanation of light. It is expected that permit holders have done all that is reasonable to mitigate light emissions to surrounding areas, without compromising the safety of workers or the facility’s safe operation.

Mitigation measures that might be considered include:

- Minimizing the amount of lighting required while ensuring safe operation of the facility,
- Minimizing brightness of lights to the extent practicable,
- Use of automated sensors that shut down lighting in areas of no activity where it is safe to do so, and,
- Re-angling, shading or screening of lighting.

As required in Appendix B of this manual, a summary of how light pollution has been identified, considered and mitigated must be included as a mandatory application deliverable for gas processing plants.
4.3.4 Facility Specific Activity Requirements

This section outlines application requirements for facility applications. Requirements are dependent on the characteristics of each facility activity and are outlined in full details below including a description, details of additional information and requirements. In most cases, the details are input into the facility application tab within AMS, but may require the upload of an attachment to support the details including:

- Project description (as described below).
- Piping and instrumentation diagram.
- Process flow diagram.
- Gathering system schematic.
- Plot plan.
- Air dispersion model (as described below).
- Dehydration engineering and operations sheet (as described below).
- Discharge of waste reporting (as described below).
- Sand Management Plan (as described below).
- A table of all design codes to be used in the facility design, construction and operation including a summary of the scope of application of each code within the facility.
- A table of all natural gas fired appliances proposed at the facility with the corresponding ASME Boiler and Pressure Vessel Code section, burner control system standard, appliance rating, and pressure piping standard, for which the appliance was designed.

Attachments must meet specific size and file formatting restrictions in order to be uploaded correctly as defined in Section 5.8 of this manual.

1. Project description

Provide a brief description of the project and any comments relevant to the facility and/or application. Specific information is required in project descriptions accompanying new facility applications and facility amendment applications and should include:
4.3 Completing Activity Details: Facility Activity

- New facility application – include oil condensate capacities in project description,
- New facility application – include the means and plans for security and access control in accordance with Section 39(3) of the Drilling and Production Regulation and/or Section 8(1)(e) of the Liquefied Natural Gas Facility Regulation in project description,
- Notice of Intent to suspend a gas plant or other facility: include a list of wells from the schematic, a rationale for shut-in and plan and duration of shut in in project description. Must also show provisions have been made to:
  i. Store, handle and dispose of toxic material,
  ii. De-pressure the facility,
  iii. Dispose of corrosive, combustible or explosive fluids,
  iv. Minimize or prevent degradation of the plant or facility equipment, vessels and piping,
  v. Secure the plant or facility against unauthorized entry and vandalism,
  vi. Periodically have the plant or facility and site inspected by qualified persons, and,
  vii. Address any other concerns the Commission has identified.

2. Air Dispersion Modelling

Applicants shall consider the impacts to ambient air quality as a result of routine combustion of sour gas and/or combustion of gas containing $\geq 1$ mole per cent $\text{H}_2\text{S}$ for a duration of $\geq 15$ minutes or that results in 1 tonne/rolling 24 hours of sulphur emissions. Results and records of air dispersion modelling must be attached to facility permit applications where this applies. Further information can be found in the Flaring & Venting Reductions Guideline, Section 6.10.

3. Dehydrator Engineering and Operations Sheet

A Dehydrator Engineering and Operations Sheet (DEOS) must be attached to facility permit or amendment applications where new or used glycol dehydration equipment is to be installed, where existing glycol dehydration equipment is to be modified, or requested changes to the facility affect the dehydration process. The DEOS must show that the dehydration process will follow the Commission’s
policy on benzene emissions outlined in the Flaring and Venting Reduction Guideline.

4. Discharge of Waste

Some facilities require a waste discharge authorization under Section 6 of the Oil and Gas Waste Regulation. This approval is required when:

- The cumulative rated power of all compressor drivers is greater than 600 but less than 3,000 kilowatts of total power,
- The cumulative rated power of all oil pump drivers is greater than 600 but less than 3,000 kilowatts of total power,
- The cumulative rated power of all electricity generator drivers is greater than 600 but less than 3,000 kilowatts of total power,
- The facility includes dehydrators, line heaters or treaters that combust high sulphur gas (> 1 per cent) and are each rated at 150 kilowatts or more, or,
- The facility is a processing plant.

The first three items in the bulleted list above are individual entities and must not be combined to determine total driver power. The Application Management System prompts for the upload of a completed Schedule 3 form if an approval under Section 6 OGWR is required. The Commission’s Environmental Management and Reclamation department conducts the appropriate review and determination process for waste discharge approvals based on the information entered at time of facility application. No separate application is needed.

Some facilities are not subject to the OGWR, thus requiring a Waste Discharge permit under the Environmental Management Act and are described in Section 2(1) of the OGWR. Contact the Commission’s Director, Environmental Management and Reclamation for more information.

Additional Facility Requirements

1. Engineering Assessment

The Commission may request an engineering assessment, as deemed necessary. Engineering assessments must be completed in accordance with the latest version of CSA Z662, including:
4.3|Completing Activity Details: Facility Activity

- Design capacity of the facility and design standard used.
- Gas rate for a gas facility and solution gas rate for an oil facility.
- Total sulphur emissions of the facility.

2. Sand Management Plan

All operators of wells within British Columbia utilizing sand fracturing are required to develop and implement an appropriate Sand Management Plan. The Sand Management Plan is a comprehensive plan outlining the preventative steps to reduce, monitor, and capture sand returns, incorporate leak detection, monitor and maintain piping integrity, and ultimately minimize the risk of loss of containment due to sand erosion. The Sand Management Plan, and all records relating to sand monitoring and testing programs, must be maintained and made available to the Commission upon request. The Sand Management Plan must take into consideration and document:

- procedures for monitoring sand returns during cleanup and define the cleanup target criteria for sand returns,
- procedures for monitoring sand returns upon initial production, during the life of a well, and after periods of extended pressure buildup,
- proposed de-sanding equipment upon initial production and throughout the life of a well
- piping configurations to minimize erosion,
- well facility design to detect and control leaks as quickly as practicable,
- maximum velocity determination and methods to keep velocities within appropriate and defined parameters (such as limiting velocities to 25 m/s as stated by NORSOK standard P-001),
- baseline and ongoing ultrasonic testing, and interpretation of results,
- justification for location of erosion sensing devices and demonstration of effectiveness, if applicable,
- management of design changes, and
3. Water Management Plan

All water hub facilities and facilities with excavated ponds and pits or permanent C-rings must include a water management plan (WMP) with the application. The water management plan is a comprehensive plan outlining the process and inventory of produced and fresh water, as well as preventative designs and procedures. All records relating to water monitoring and testing programs must be maintained and made available to the Commission upon request. The Water Management Plan must include at a minimum:

- Description of the water process flow.
- Water inventory management and monitoring.
- Regulatory submissions.
- Leak detection description.
- Counter measures, responses and training in the event of a spill.
- Spill kits and equipment on site.

Other details in the plan may include:

- Design and geotechnical details.
- Wildlife mitigation.
- Likely spill / leak scenarios.

4. Commingled Production

Commingled production approvals are required attachments for some facility applications. The Commission’s Production Allowables web page provides more information on commingled production approvals.
Gas Processing Plant: Additional Requirements

The review must include the rationale for constructing the newly proposed plant after consideration of existing active plants and pipeline infrastructure feeding into active plants within a 50 kilometre radius.

Appendix B of this manual provides a detailed listing of technical documentation to be included in an application for a gas processing plant in addition to specific details on requirements for plans, diagrams and maps.

4.3.5 Additional Considerations for Facilities Activity

Emergency Response Planning

An Emergency Response Plan (ERP), or an update to an existing plan, must be submitted to the Commission in accordance with Section 7 of the Emergency Management Regulation. Emergency planning zones are determined using H₂S content of product in a pipeline, well or at a facility. Review Schedule A of the Emergency Management Regulation for more information.

4.3.6 Facilities Activity Requirements Data Field Completion

Table 4-E below provides detailed instructions for each of the data fields requiring input (not auto populated) within the Application Management System.

**Table 4-E: Application Instruction Table for the Facilities Tab**

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the activity within a previously assessed construction corridor</td>
<td>Indicate if the proposed activity falls within a previously assessed review corridor or previously assessed construction corridor.</td>
</tr>
<tr>
<td>Activity Description</td>
<td>Provide a brief description of the project and any comments relevant to the facility and/or application.</td>
</tr>
<tr>
<td>Engineer Project File Name (Optional)</td>
<td>Applicant's engineering project file number.</td>
</tr>
<tr>
<td>Label</td>
<td>Instructions</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Process Flow Diagram Attachment</td>
<td>Upload diagram showing all major equipment, vessels, meters, and interconnecting piping (process, fuel, flare and vent at a minimum) at the facility, or within an identified skid or building.</td>
</tr>
<tr>
<td>Project Description Attachment</td>
<td>A description of the proposed facility activity must be provided and must include the location of where the facility construction will commence.</td>
</tr>
<tr>
<td>Piping &amp; Instrumentation Diagram Attachment</td>
<td>Upload a detailed diagram for each facility or skid/building identifying all instrumentation symbols, valves &amp; connections, piping and vessels, line numbering, fuel gas, flare and vent streams. This drawing must include all safety systems such as H₂S detection, flammable gas detection, and fire detection inside and outside of buildings. This information, from the individual drawings, can also be summarized on a separate P&amp;ID. The P&amp;ID must also include the initial high and low setpoints of all pressure switches proposed at the facility.</td>
</tr>
<tr>
<td>Gathering System Schematic Attachment</td>
<td>Upload a diagram indicating the flow path of oil and/or gas (including liquids) in pipelines between wells (well site facilities) and central facilities they are physically linked to (connected by pipelines). Identify the route of the primary product from the well to the reporting facility, and include the Well Authorization numbers and Facility Codes that are a part of the new linkage.</td>
</tr>
<tr>
<td>Plot Plan Attachment</td>
<td>Upload a diagram identifying the surface area required for the facility and the proposed equipment, including but not limited to, the lease area, the access road point of entry including proposed fencing, gates and/or access control measures (Drilling and Production Regulation sec. 47), and how the access continues past the facility site if applicable, the equipment layout, (for example all storage tanks, buildings, compressors, flare stacks including flare blackened area, flare knock out drums, line heaters, pump jacks, etc.) with distances shown in meters (Drilling and Production Regulation sec. 48) facility piping, all wellhead positions (clearly labelled by location), fire break area, where the riser/pipeline starts and ends on a site and how it leaves the site going into the right-of-way. Fencing and/or gates must also be shown on the plot plan. The plot plan must also include all legal easements and right-of-ways within 100 meters of the site boundary including those for highways, roads, unconstructed</td>
</tr>
</tbody>
</table>
### Label

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
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<tbody>
<tr>
<td>road allowances, pipelines, railways, and other surface improvements.</td>
<td></td>
</tr>
</tbody>
</table>

### Emissions Air Details

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dehydrator Benzene Annual Emissions (t/y)</td>
<td>Enter Dehydrator Benzene Annual Emissions tonnes/year.</td>
</tr>
<tr>
<td>Total Flared Volume (m³/day)</td>
<td>Includes natural gas volumes used for pilot, purge, and all routine, continuous or regularly occurring flared or incinerated volumes.</td>
</tr>
<tr>
<td>Total Vented Gas Volume (m³/day)</td>
<td>Includes vented natural gas used for pneumatic instrumentation, or to provide motive force to pumps, and gas from routine, continuous or regularly occurring sources such as production tanks, glycol dehydration or compressor distance piece vents.</td>
</tr>
<tr>
<td>Maximum Sulphur Emission (t/d)</td>
<td>Enter Maximum Sulphur Emission tonnes/day.</td>
</tr>
</tbody>
</table>

**Will the proposed application include routine combustion of sour gas and/or combustion of gas containing >= 1 mole per cent H₂S for a duration of >= 15 minutes or that results in 1 tonne/rolling 24 hrs of sulphur emissions?**

Determination of the impact to ambient air quality as a result of the proposed operation. Critical for operations which propose to routinely combust sour gas as the province has lowered ambient air quality objectives for continuous SO₂ emissions. Sour non-routine flaring scenarios are assessed against the former provincial SO₂ objectives. Further details can be found in the Flaring & Venting Reduction Guideline, Section 6.10.

### Area Details

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance to Nearest Occupied Dwelling (km)</td>
<td>Indicate the distance in kilometres to the nearest occupied dwelling. Distances must be accurately measured if the occupied dwelling is located within a 2 kilometre radius from the proposed activity. In remote areas, it is acceptable to estimate the distance to the nearest occupied dwelling. The Commission does not require applicants to search a large radius to identify the nearest occupied residence. It is sufficient to ground truth the area out to the edge of the Emergency Awareness Zone (EAZ).</td>
</tr>
<tr>
<td>Distance to Nearest Urban Center (km)</td>
<td>Indicate the distance in kilometres to the nearest urban centre. An urban centre is defined as a city, town, village, summer village, hamlet with no less than 50 separate buildings, each of which must be an occupied dwelling. Also, any First Nation reserve, other...</td>
</tr>
<tr>
<td>Label</td>
<td>Instructions</td>
</tr>
<tr>
<td>-------</td>
<td>--------------</td>
</tr>
<tr>
<td>incorporated centres and any similar development the Commission may designate as an urban centre.</td>
<td></td>
</tr>
<tr>
<td>Distance to Nearest School (km)</td>
<td>Indicate the distance to the nearest school, in kilometres.</td>
</tr>
<tr>
<td>Distance to Nearest Populated Area (km)</td>
<td>Indicate the distance in kilometres to the nearest populated area. A populated area is defined as an occupied dwelling, school, picnic ground or other place of public concourse. Distances must be accurately measured if the populated area is located within 2 kilometre from the proposed activity. If the populated area is greater than 2 kilometres from the proposed activity, distances can be estimated.</td>
</tr>
</tbody>
</table>

**Facility Details Tab**

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed Facility DLS Location: LSD</td>
<td>Enter Legal Subdivision (LSD) Value: 01 to 16.</td>
</tr>
<tr>
<td>Proposed Facility DLS Location: Section</td>
<td>Enter Section Value: 01 to 36.</td>
</tr>
<tr>
<td>Proposed Facility DLS Location: Township</td>
<td>Enter Township Value: 076 to 088.</td>
</tr>
<tr>
<td>Proposed Facility DLS Location: Range</td>
<td>Enter Range Value: 13 to 26.</td>
</tr>
<tr>
<td>Proposed Facility NTS Location: Quarter Unit</td>
<td>Enter Quadrant Unit Value: A to D.</td>
</tr>
<tr>
<td>Proposed Facility NTS Location: Unit</td>
<td>Enter Map Unit Value: 001 to 100.</td>
</tr>
<tr>
<td>Proposed Facility NTS Location: Block</td>
<td>Enter Map Block Value: A to L.</td>
</tr>
<tr>
<td>Proposed Facility NTS Location: Map</td>
<td>Enter Mapsheet and Map Group Value in format XXX-X-XX. XXX = Mapsheet Value: 082, 083, 092, 093, 094, 095, 102, 103, 104, 114. X = Mapsheet Value: A to P. XX= Map Group Value: 01 to 16.</td>
</tr>
<tr>
<td>Equipment Type</td>
<td>Select one or more types of equipment planned for the facility, if applicable.</td>
</tr>
<tr>
<td>Label</td>
<td>Instructions</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Maximum Inlet H₂S Content</td>
<td>Indicate the Maximum Inlet H₂S Content.</td>
</tr>
<tr>
<td>Maximum Inlet H₂S Unit of Measure</td>
<td>Indicate the unit of measure used to denote the maximum content of H₂S in inlet gas.</td>
</tr>
<tr>
<td>Maximum Design H₂S Content</td>
<td>Indicate the maximum content of H₂S incorporated into facility design.</td>
</tr>
<tr>
<td>Maximum Design H₂S Unit of Measure</td>
<td>Indicate the unit of measure used to denote the maximum content of H₂S incorporated into facility design.</td>
</tr>
<tr>
<td>Design Inlet Capacity</td>
<td>Indicate the maximum designed inlet capacity of the facility.</td>
</tr>
<tr>
<td>Design Inlet Capacity Unit of Measure</td>
<td>Indicate the unit of measure used to denote the design inlet capacity incorporated into facility design.</td>
</tr>
<tr>
<td>Leak Detection Type</td>
<td>Select one or more leak detection types for this facility.</td>
</tr>
<tr>
<td>Facility Losses (m³/day)</td>
<td>Includes fuel gas removed from the process and used at the facility (for heating, dilution gas, internal combustion engines, compressor engine start gas, etc.), gas used for pneumatic instrumentation or to provide motive force to pumps, gas from routine, continuous or regularly occurring vent sources (such as production tanks, glycol dehydration, compressor distance piece vents or pigging equipment), and flared or incinerated gas (including pilot and purge). This would not include any losses from natural gas pipelined to the facility, propane trucked in, or the separation and subsequent removal of produced liquid hydrocarbons.</td>
</tr>
<tr>
<td>Gas Processing Plant Details</td>
<td></td>
</tr>
<tr>
<td>Gas Processing Plant Proliferation Review Indicator</td>
<td>Indicate if a gas processing plant proliferation review is attached. A gas processing plant proliferation review must include the rationale for constructing the newly proposed plant after consideration of existing active plants and pipeline infrastructure feeding into active plants within a 50 kilometre radius. This is required as an attachment with the application for new plants and amendments that increase the throughput of the plant.</td>
</tr>
<tr>
<td>Acid Gas Stream H₂S Component Management</td>
<td>Select the method that will be used to manage the acid gas stream H₂S component.</td>
</tr>
<tr>
<td>Label</td>
<td>Instructions</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Acid Gas Stream CO&lt;sub&gt;2&lt;/sub&gt; Component</td>
<td>Select the method that will be used to manage the acid gas stream CO&lt;sub&gt;2&lt;/sub&gt; component.</td>
</tr>
</tbody>
</table>

### Well Facility Details

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Well Authorization Number</td>
<td>Enter the Well Authorization (WA) number.</td>
</tr>
</tbody>
</table>

### Facility Equipment Details: Dehydrator

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Dehydrators</td>
<td>Indicate the number of dehydrators at the facility. For amendment applications, the “Number of Dehydrators” should equal the number of dehydrators permitted plus the number of dehydrators being added with the subject amendment; this number cannot be less than the number of dehydrators constructed. To remove constructed equipment, the permit holder must submit a service desk request stating which of the constructed equipment is being removed, as well as what the new total number of dehydrators will be following the removal.</td>
</tr>
<tr>
<td>Benzene emissions per calendar year in tonnes</td>
<td>Enter Dehydrator Benzene Annual Emissions tonnes/year.</td>
</tr>
<tr>
<td>Changes Effect Existing Dehydration Processes</td>
<td>If yes, upload a Dehydrator Engineering and Operations Sheet (DEOS).</td>
</tr>
</tbody>
</table>

### Facility Equipment Details: Compressor

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prime Mover Type</td>
<td>Indicate if the prime mover is powered by gas or electricity.</td>
</tr>
<tr>
<td>Total Number of Prime Movers Proposed</td>
<td>Indicate the number of sales and/or inlet compressors at the facility (this does NOT include acid gas compressors, VRUs, recycle compressors, overhead compressors, refrigeration compressors, instrument air compressors and similar). For a well facility, indicate the number of natural gas compressors on site (such as booster compressors, casing gas compressors or gas lift compressors). For amendment applications, the “Total Number of Prime Movers Proposed” should equal the number of prime movers permitted plus the number of prime movers being added with the subject amendment; this number cannot be less than the number of prime movers constructed. To remove constructed equipment, the permit holder must submit a service desk request stating which of the constructed equipment is being removed.</td>
</tr>
</tbody>
</table>
Label | Instructions
--- | ---
Total Power Proposed (kW) | Indicate the total power of all compressors included in the Number of Prime Movers Proposed section.

Facility Equipment Details: Pump

| Prime Mover Type | Indicate if the prime mover is powered by gas or electricity. |
| Total Number of Prime Movers Proposed | Indicate the number of pumps used to transport hydro carbon liquid in a major pipeline (oil, LPV or HPV) or to pump fresh water from a major water source (this does NOT include LACT unit pumps, chemical pumps, truck loading pumps, water disposal, transfer, or injection pumps and similar). For amendment applications, the “Total Number of Prime Movers Proposed” should equal the number of prime movers permitted plus the number of prime movers being added with the subject amendment; this number cannot be less than the number of prime movers constructed. To remove constructed equipment, the permit holder must submit a service desk request stating which of the constructed equipment is being removed, as well as what the new total number of prime movers constructed and new total power will be following the removal. |
| Total Power Proposed (kW) | Indicate the total power of all pumps included in the Number of Prime Movers Proposed section. |

Facility Equipment Details: Generator

| Total Number of Prime Movers Proposed | For amendment applications, the “Total Number of Prime Movers Proposed” should equal the number of prime movers permitted plus the number of prime movers being added with the subject amendment; this number cannot be less than the number of prime movers constructed. To remove constructed equipment, the permit holder must submit a service desk request stating which of the constructed equipment is being removed, as well as what the new total number of prime movers constructed and new total power will be following the removal. |
| Total Power Proposed (kW) | Indicate the total power of all generators. |

Facility Equipment Details: Flare Stack
<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Flares</td>
<td>Indicate the number of flare stacks at the facility. For amendment applications, the “Number of Flares” should equal the number of flares permitted plus the number of flares being added with the subject amendment; this number cannot be less than the number of flares constructed. To remove constructed equipment, the permit holder must submit a service desk request stating which of the constructed equipment is being removed, as well as what the new total number of flares will be following the removal.</td>
</tr>
<tr>
<td>Estimated Low Pressure Flare Rate (m$^3$/day):</td>
<td>Provide estimated flare rates for the low pressure flare. This may include volumes from continuous or intermittent low pressure streams such as production tanks, glycol regenerator overhead still columns, purge and pilot gas, and for regular maintenance.</td>
</tr>
<tr>
<td>Estimated High Pressure Flare Rate (m$^3$/day):</td>
<td>Provide estimated flare rates for the high pressure flare. This may include volumes from continuous or intermittent high pressure streams such as glycol flash tanks, compressor or facility equipment depressurization events, purge and pilot gas, and for regular maintenance.</td>
</tr>
<tr>
<td>Safety Controls</td>
<td>Select one or more safety controls planned for the flare system.</td>
</tr>
</tbody>
</table>

**Facility Equipment Details: Incinerator**

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of incinerators</td>
<td>Indicate the number of incinerators at the facility. For amendment applications, the “Number of Incinerators” should equal the number of incinerators permitted plus the number of incinerators being added with the subject amendment; this number cannot be less than the number of incinerators constructed. To remove constructed equipment, the permit holder must submit a service desk request stating which of the constructed equipment is being removed, as well as what the new total number of incinerators will be following the removal.</td>
</tr>
<tr>
<td>Incinerator Measurement Proposed Indicator</td>
<td>Indicate if incinerator measurement is planned for the facility.</td>
</tr>
<tr>
<td>Safety Controls</td>
<td>Select one or more safety controls planned for the incinerator.</td>
</tr>
</tbody>
</table>

**Facility Equipment Details: Facility Storage**

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of LNG Storage Tanks</td>
<td>Indicate the number of tanks/pits/ponds at the facility. For amendment applications, the number of tanks/pits/ponds should</td>
</tr>
</tbody>
</table>
### Technical Specification Details

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNG Storage Capacity (m³)</td>
<td>Indicate the LNG facility storage capacity in m³.</td>
</tr>
<tr>
<td>Produced Fluid in Tanks - Capacity (m³)</td>
<td>Indicate the produced fluid tank capacity in m³.</td>
</tr>
<tr>
<td>Produced Fluid in Pits or Ponds - Capacity (m³)</td>
<td>Indicate the produced fluid pit or pond capacity in m³.</td>
</tr>
<tr>
<td>Source of Criteria Air Contaminants</td>
<td>As defined by Environment Canada, pollutants produced from the combustion of fossil fuels including SOX, NOX, PM, VOC, CO.</td>
</tr>
<tr>
<td>Is the facility described in Section 2(1) of the Oil &amp; Gas Waste Regulation and therefore not subject to the regulation?</td>
<td>Refer to Oil &amp; Gas Waste Regulation.</td>
</tr>
<tr>
<td>Is the facility authorized to discharge waste under Section 4 of the Oil &amp; Gas Waste Regulation?</td>
<td>Refer to Oil &amp; Gas Waste Regulation.</td>
</tr>
<tr>
<td>Does the facility require a registration to discharge waste under Section 6 of the Oil &amp; Gas Waste Regulation?</td>
<td>Refer to Oil &amp; Gas Waste Regulation.</td>
</tr>
<tr>
<td>Pressure Welding/Testing Required Indicator</td>
<td>Will this installation require pressure welding and/or pressure testing? If yes, a construction start is required.</td>
</tr>
<tr>
<td>Design Standard</td>
<td>Select the design standard(s) being used.</td>
</tr>
</tbody>
</table>
### Label | Instructions
---|---
Upload Sand Management Plan | The sand management plan is intended to be a comprehensive plan outlining the preventative steps to reduce, monitor, and capture sand returns, and incorporate leak detection and piping integrity. The plan must include: proposed de-sanding equipment, piping configurations to minimize erosion, velocity control, ultrasonic testing.
Facility Security Measures | Select all facility security measures proposed for facility security.
Will there be any venting activity? | Indicate if there will be any venting activity.
Recover Low Pressure Vapours | Indicate yes, if a method to recover low pressure vapours will be implemented.
Method | If yes; specify method: vapour recovery unit; utilize as fuel. This includes all sources including, but not limited to, tanks, instruments and pumps.
Power and Motive Source: | Select what is being used to power instruments an provide motive force to pumps.
Compressor Discharge Connected to Flare | If there is a compressor, is the start gas discharge connected to the flare system?
Cross Border Indicator | Does the facility deliver/receive production volumes into or out of the Province of British Columbia? If yes, Measurement Guideline for Upstream Oil and Gas Operations must be adhered to.

### Exemptions

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the application adhere to the Flaring &amp; Venting Reduction Guideline</td>
<td>Indicate if the application is planned to adhere to the Flaring &amp; Venting Reduction Guideline.</td>
</tr>
<tr>
<td>Does the application adhere to the Noise Control Best Practice Guideline</td>
<td>Indicate if the application is planned to adhere to Noise Control Best Practices Guideline.</td>
</tr>
<tr>
<td>Does this application adhere to the Directive on Facility Design</td>
<td>Indicate if the application is planned to adhere to Directive 2010-06 wells site Failure Investigation Prompts New Directive for Gas Wellsites in B.C. on facility design.</td>
</tr>
<tr>
<td>Exemption from Drilling and Production Regulation Indicator</td>
<td>Does the application require an exemption from the Drilling and Production Regulation?</td>
</tr>
<tr>
<td>Label</td>
<td>Instructions</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Section Exemption</td>
<td>Enter the section of the Drilling and Production regulation from which an exemption is being requested.</td>
</tr>
<tr>
<td>Section Exemption Explanation</td>
<td>Provide a detailed explanation / rationale for the regulatory exemption request. Include statements indicating why the regulation cannot be followed, proposed alternate strategies and any relevant mitigation.</td>
</tr>
<tr>
<td>Exemption from LNG Facility Regulation</td>
<td>Does the application require an exemption from the Liquefied Natural Gas Facility Regulation (LNGFR)?</td>
</tr>
<tr>
<td>Exemption Explanation</td>
<td>Provide a detailed explanation / rationale for the regulatory exemption request. Include statements indicating why the regulation cannot be followed, proposed alternate strategies and any relevant mitigation.</td>
</tr>
</tbody>
</table>
4.4 Geophysical Activity Tab

Applicants applying for a geophysical permit must complete the geophysical application tab in the Application Management System. The geophysical tab is made up of two components: geophysical details and geophysical land details.

This section includes an overview of geophysical permitting, guidance regarding geophysical planning and design, details related to geophysical specific application requirements and detailed instructions for completing the data fields within the geophysical tab.

Please Note:

This manual is written as a whole and provided to industry in sections to allow permit holders to access activity chapters. It is prudent of the permit holder to review the manual in its entirety and be aware of the content in other sections of the manual.

4.4.1 Geophysical Exploration Defined

Geophysical exploration is an oil and gas activity under the Oil and Gas Activities Act (OGAA) and is specifically defined in the Petroleum and Natural Gas Act (PNG) Act as:

- Investigation of the subsurface by seismic, gravimetric, magnetic, electric and geochemical operations and by any other method approved by the Commission, but does not include the use of geophysical well
logs, vertical seismic profile surveys or other surveys obtained from a well.

Approved oil and gas applications receive a permit under Section 25 of OGAA to carry out construction and operations pertinent to the activity. The permit expires where construction activities have not started within two (2) years of permit issuance. Unless expired, the permit remains active until cancelled, suspended or declared spent, according to the provisions of OGAA.

A geophysical exploration permit is spent when the Commission receives a final plan from the permit holder. The Geophysical Regulation states final plans must be submitted within 60 days after the date of project completion.

4.4.2 Creating a New Geophysical Application

New Geophysical Applications

A new geophysical permit is required for all new geophysical exploration programs to be carried out including programs or portions of programs carried out within existing disturbance.

Since geophysical exploration includes surface, subsurface and aerial, applicants must indicate the program type, energy source and construction method for the activity within the geophysical details component of the geophysical tab.

Geophysical Permit Amendments

A permit amendment is required before the associated changes are carried out. A geophysical exploration permit amendment is required for the following scenarios:

- Adding lines.
- Changing line locations or details, where the permit does not explicitly provide for this via authorization of ‘Line Shift Variance’.
- Corrections to inadvertent data errors where the error is in the permit or impacted on the decision.
4.4.3 Geophysical Exploration Planning & Design

This section provides typical planning and design requirements, guidelines and considerations when planning and designing geophysical exploration. The standards and guidelines presented here form a substantial basis for assembling an application. The Commission reviews the geophysical application relative to the engineering and technical information provided in the Application Management System; therefore, applicants should review this section for an indication of any application requirements or attachments required in relation to the required components.

Regulatory Requirements

Geophysical exploration activities must meet the design and operational requirements outlined in the Oil and Gas Activities Act (OGAA), Geophysical Exploration Regulation (GER) and the Environmental Protection and Management Regulation (EPMR).

If an exemption is requested from regulatory requirements, an exemption request must be prepared at the time of application and include:

- Specific regulatory provision requiring an exemption.
- Rationale for exemption (explanation of why an exemption is required).
- Proposed plan showing mitigation strategies to reduce impacts.

If exemptions are approved prior to the application, this approval must be attached to the application.

Specific to geophysical exploration, an applicant may request an exemption from part or all of the geophysical project report and the final plan in accordance with Sections 2 and 3 of the Geophysical Exploration Regulation.

Guidance Requirements

In addition to this Oil and Gas Activity Application Manual, geophysical exploration activities should meet guidance recommendations in the following Commission documents:

- Oil and Gas Activity Operations Manual.
• Environmental Protection & Management Guideline.

• Horn River Basin and Muskwa-Kechika Management Area Guidance document.

If oil and gas activities cannot be carried out in accordance with the guidance recommendation then justification must be included in the application. Include specifics of the guidelines not followed, an explanation of why they cannot be followed, proposed plan and applicable mitigation strategies.

Notification in Advance of Camp Applications

Applicants must notify Peace River Regional District (PRRD) as a rights holder in advance of submitting any camp applications.

Geophysical Exploration Buffers & Prior Consent for Reduced Buffer Distances

Section 4 and Schedule 1 and 2 of the Geophysical Exploration Regulation (GER) states buffer distances for geophysical exploration near pipeline, utility, residence, etc. and establishes buffer distances in relation to prescribed structures for the use of energy sources in carrying out geophysical exploration.

Where reduced buffer distances are planned, as provided in Schedule 2 of GER, written consent must be obtained from the owner of the structure prior to carrying out the activity. In order to avoid amendments, the Commission encourages applicants to obtain consent from structure owners for any planned reduced buffer distances prior to application submission.

When planning projects and buffer distances, applicants should take into consideration that some residences, as defined within the GER, may not be registered or identified in provincial land registries. All residences, including permanent and temporary dwellings, and cabins, must be factored into application planning and buffers complied with during geophysical operations.
Overlapping Projects

Applicants should use the analysis tool within the Application Management System to investigate for overlapping geophysical projects in an effort to minimize environmental impacts on the land base. Overlaps exist where two or more geophysical projects cover portions of the same area of land.

The coordination of overlapping projects should occur wherever practicable and arrangements made to use the same seismic lines (source or receiver) and/or access other geophysical projects for overlap. As a general permit condition, the Commission requires that any opportunity to coordinate or use existing lines or access identified in the field (not previously identified by an applicant or the Commission) must be taken wherever practicable. Justification and mitigation measures must be explained for geophysical programs overlapping and not coordinated or using existing seismic lines within 400 metres of the proposed line.

Geophysical Line Shift Variance

Line shift variance provides flexibility in the field to move geophysical lines one way or another within the variance permitted. The line shift variance must comply with buffer distances and appropriate archaeology and consultation and notification requirements must be conducted. Geophysical projects without a line shift variance and needing to move locations require an amendment.

Completing Reconnaissance as Part of Geophysical Application Planning

Observing field conditions is critical, and reconnaissance evaluations are essential to planning for and completing a geophysical exploration application. Ideally, site evaluations are assessed through a combination of aerial and ground reconnaissance.

Pictures taken during the area reconnaissance may accompany the application in order to assist in the Commission decision making process. Digital pictures must be .jpg format uploaded in the attachments tab of AMS. Suggested pictures include:

- Wildlife/wildlife features encountered.
- Stream crossing locations.
• Re-growth on existing lines that are planned for use.
• Overall picture of area.

In addition, applicants may be able access the following tools and methods through Data BC and other external sources to assist in evaluating site conditions and operational planning:
• Crown land status maps.
• Forest development plans/ forest stewardship plans.
• Aerial photography.
• Forest cover maps.
• Fish and wildlife mapping.
• Light Detection and Ranging (LiDAR).

4.4.4 Geophysical Program Activity Requirements

This section outlines application requirements for geophysical applications. Requirements are dependent on the characteristics of each geophysical program. In most cases, the details are input into the geophysical application tab.

Applicants must provide general statements regarding primary and secondary watercourse crossing methods and how they will be constructed. Applicants are then required to submit a list of all watercourse crossings constructed with method of crossing utilized within the post construction submission (final plan).
Mapping Requirements Specific to Geophysical Programs

In addition to the mapping requirements for all projects, proposed geophysical projects require the following mapping:

1) 1:50,000 Maps:
   - 2D project maps require UTM (NAD 83 CSRS) or latitude and longitude coordinates at the start and end of each line.
   - 3D project maps require UTM (NAD 83 CSRS) or latitude and longitude coordinates at the corners of the project area.
   - Forestry cutblocks (colour coded to status) and any other overlapping tenures.
   - Mechanical creek crossings.
   - Approximate number of push outs to be constructed; total to be confirmed on the final plan.
   - If heli-assisted operations are proposed, amount and size of helipads must be indicated on the legend; total to be confirmed on final plan.
   - Include staging areas and campsites (if required for less than 100 days).

2) 1:250,000 Access Map (this can be inset into the above map or on a separate map):
   - Access to the project highlighted in yellow.
   - Project outline.
   - Trapper boundaries and numbers.

4.4.5 Geophysical Program Activity Submission: Data Field Completion

Table 4-F below provides detailed instructions for each of the data fields requiring input (not auto populated) within the Application Management System.
**Table 4-F: Application Instruction Table for the Geophysical Tab**

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Type</td>
<td>Select the appropriate type to describe the project: two dimensional seismic, three dimensional seismic, other - may include: aeromagnetic, geomagnetic, and geochemical or 4D microseismic.</td>
</tr>
<tr>
<td>Program Name</td>
<td>Indicate name that the project is running under.</td>
</tr>
<tr>
<td>Energy Source</td>
<td>Choose the appropriate energy source to describe the project: dynamite, vibroseis, other - provide description when selecting other.</td>
</tr>
<tr>
<td>Lines within 400m Indicator</td>
<td>Indicate yes, if lines are planned within 400 metres of existing lines. Indicate no, otherwise.</td>
</tr>
<tr>
<td>Rationale Explanation</td>
<td>If lines are planned within 400 metres of existing lines, provide rationale and indicate why the existing lines cannot be used.</td>
</tr>
<tr>
<td>Rationale Explanation</td>
<td>If proposed program overlaps another program, provide a justification.</td>
</tr>
</tbody>
</table>

**Summary by Type of Cut**

| Width (m)                             | Line Width should always be measured relative to a known reference point (such as a shot point), and measured at a recommended interval of every 500 metres. Where dense stands exist, the line width is usually measured from standing tree to standing tree across the line. In open stands, the line width is the disturbed area used for operational purposes, and is at least as wide as the mechanical equipment used. In all cases, the line width measurement must be perpendicular to the line direction and must include the area occupied by the windrow. |

**Exemptions**

<p>| Line Shift Variance Requested         | Select yes if the geophysical project proposes to have the ability to shift the movement of lines a certain distance either side of the seismic lines. Indicate no otherwise. |
| Exemption from Geophysical Exploration Regulation | Indicate if an exemption from the Geophysical Exploration Regulation is required.                                                   |
| Section of Regulation                 | Provide the section of the regulation for which an exemption is required.                                                               |</p>
<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explanation</td>
<td>Provide a detailed explanation / rationale for the regulatory exemption request. Include statements indicating why the regulation cannot be followed, proposed alternate strategies and mitigation.</td>
</tr>
</tbody>
</table>
4.5 Road Activity Tab

Applicants applying for an oil and gas road permit must complete the road application tab in the Application Management System. The road tab is made up of three components: road overview, road details, and road land details.

This section includes an overview of road permitting, guidance regarding road planning and design, details related to road-specific application requirements and detailed instructions for completing the data fields within the road tab.

Please Note:

This manual is written as a whole and available to industry in sections to allow permit holders to access activity chapters. It is prudent of the permit holder to review the manual in its entirety and be aware of the content in other sections of the manual.

4.5.1 Roads Defined

Oil and gas roads are prescribed as an oil and gas activity in OGAA and are defined within the Oil and Gas Road Regulation (OGRR) as:

(a) A road or portion of a road that:

- Is constructed or maintained to facilitate the carrying out of a primary activity,

- Has not been deactivated, and
• Subject to paragraph (b), is not required to be maintained under another enactment or authorization;

(b) A road or portion of a road that, before the coming into force of [the Oil and Gas Road Regulation], was constructed under an authorization under the Land Act or the Petroleum and Natural Gas Act, or as a Petroleum Development Road, and is used to carry out a primary activity.

Approved oil and gas applications receive a permit under Section 25 of OGAA to carry out construction and operations pertinent to the activity. The permit expires where construction activities have not started within two (2) years of permit issuance. Unless expired, the permit remains active until cancelled, suspended or declared spent, according to the provisions of OGAA.

The OGRR prescribes the rights and obligations of permit holders related to construction, maintenance, use and deactivation of oil and gas roads.

**Road Types**

Applicants must apply for a specific type of oil and gas road. The appropriate road type must be selected in the road details component of the road tab in the Application Management System. Road types are defined further in the data field tables and in the Commission glossary and include:

- Long-term, all-weather road is a roadbed surfaced with gravel.
- Short-term, low-grade road is constructed during non-frozen ground conditions with a minimal grade and adequate drainage control. Low-grade access may be constructed during frozen ground conditions.
- Snow and/or ice road is construction and suspension activities carried out during frozen ground conditions with minimal soil disturbance.
- Existing traditional winter access is construction and suspension activities carried out during frozen ground conditions with minimal soil disturbance.
4.5.2 Creating a New Road Application

New Road Application

A new oil and gas road permit is required for any new road to be constructed and operated, for a non-status road to be maintained or modified by an oil and gas operator, or to acquire an oil and gas road permit for a road currently regulated under another statutory authority (Transfer of Jurisdiction).

Roads can be applied for individually or with other oil and gas activities as part of a multi-activity project application. The system generates data input requirements for additional activities specified within the spatial data upload.

Road Amendment

A road permit amendment is required to:

- Carry out activities not authorized by, or which are alterations to the original permit.
- Modify an OGAA permitted road, except modifications allowed under the terms of the permit or the Oil and Gas Road Regulation.

Please Note:

An OGAA road permit is required prior to carrying out maintenance activities on non-status roads. Several non-status roads can be included in one road permit application by identifying each road as a separate segment in the application. Permit holders will be required to submit a Historical submission for existing permitted roads that have not been transitioned to an OGAA road permit or have not been reconciled prior to submitting an amendment.
Figure 4-A: Examples of Whole Non-status Road or Road Segments

<table>
<thead>
<tr>
<th>A.</th>
<th>B.</th>
<th>C.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site of existing / planned activity</td>
<td>Site of existing / planned activity</td>
<td>Site of existing / planned activity</td>
</tr>
<tr>
<td>Non-status road being applied for</td>
<td>Non-status road being applied for</td>
<td>Non-status road being applied for</td>
</tr>
<tr>
<td>Other existing / planned road</td>
<td>Other existing / planned road</td>
<td>Other existing / planned road</td>
</tr>
</tbody>
</table>

Legend:
- Site of existing / planned activity
- Non-status road being applied for
- Other existing / planned road

Transfer of Jurisdiction

Applications for a “transfer of jurisdiction” of an existing road authorized by the Ministry of Forests, Lands and Natural Resource Operations & Rural Development (FLNRORD) must be submitted as a new road application. The Commission will not transfer a road issued by FLNRORD to an oil and gas operator; but will work with FLNRORD to enable the issuance of an OGAA road permit.

To apply for an OGAA road permit on an existing road authorized by FLNRORD, applicants should include the following additional attachments:

- Documentation indicating the current road tenure holders’ willingness to relinquish the road in favour of an oil and gas operator.
- Confirmation from FLNRORD of willingness to close the road permit upon the Commission’s approval of an oil and gas road permit.

The Commission forwards a copy of the permit to FLNRORD in order to terminate the FLNRORD road permit. During this interim period, there may be spatial overlap of the FLNRORD permit and OGAA permit while the digital inventory gets updated.
Historical Submission: Road

The historical road submission is intended to define the process to transition existing permitted oil and gas roads to an OGAA road permit and to collect or update missing information required for road reconciliation.

The historical road submission is selected from the create “application type” menu as “historical submission”. Scenarios where a historical road submission is appropriate are:

- When an existing permitted road has not been transitioned to an OGAA road permit.
- The road information has not been reconciled.
- The road information is inaccurate or missing segment data and/or stream crossing information.

An existing permitted road must be reconciled and hold a valid OGAA road permit before the permit holder may apply to amend or modify the road.

Please Note:

If a permit holder wishes to submit a historical submission for a road that has been reconciled and holds a valid OGAA road permit, the applicant must provide a rationale explaining why the submission is required.

4.5.3 Road Planning & Design

This section provides typical planning and design requirements, guidelines and considerations when planning and designing a road for an oil and gas activity application. The standards and guidelines presented here form a substantial basis for assembling an application. The Commission reviews the road application relative to the engineering and technical information provided in the Application Management System; therefore, applicants should review this section for an indication of any application requirements or attachments required in relation to the required components.
Regulatory Requirements

Roads must meet the design and operational requirements outlined in the Oil and Gas Activities Act (OGAA), the Oil and Gas Road Regulation (OGRR), the Pipeline Crossings Regulation (PCR), and the Environmental Protection and Management Regulation (EPMR).

Part 3 of OGRR outlines requirements related to:

- Road construction, including clearing widths, bridges and culverts, record keeping requirements, hazard warnings and post-construction reporting.

The Water Sustainability Act gives the permit holder authorization to make changes in or about a stream. OGRR is the regulation allowing bridges and/or culverts to be placed on a road to facilitate the crossing. Permit holders must be aware of and abide by Canadian Standard Association and Canadian Highway Bridge design codes for bridges or culverts.

If an exemption is requested from regulatory requirements, an exemption request must be prepared at the time of application and include:

- Specific regulatory provision requiring an exemption.
- Rationale for exemption (explanation of why an exemption is required).
- Proposed plan showing mitigation strategies to reduce impacts.

If exemptions are approved prior to the application, this approval must be attached to the application.

Guidance Requirements

In addition to this Oil and Gas Activity Application Manual, roads should meet guidance recommendations in the following Commission documents:

- Oil and Gas Activity Operations Manual.
- Environmental Protection and Management Guideline.
Planning Road Rights-of-Way

Provide a rationale for the proposed right-of-way location chosen and overall details for the road including to and from locations, right-of-way length and maximum width. Proposed road rights-of-way must also be identified on the project construction plan. Space is provided in the application for the rationale.

Planning Construction Corridors

Provide an additional mapped area around the proposed road right-of-way providing for construction corridor. Construction corridors allow the flexibility to adjust the proposed road or related activities.

Planning for Stream Crossings

Stream crossings required for road construction can be applied for as part of a road permit application and approved under OGAA.

Stream crossing authorizations issued with a road permit are valid for the life of the road, except as otherwise limited in the permit or the Oil and Gas Road Regulation.

Road modifications requiring the installation or replacement of a bridge or major culvert associated with the road require an amendment to the road permit and an application for Changes In and About a Stream under Section 11 of OGAA and detailed in Section 4.8 of this manual.

Planning for Borrow Pits

Borrow pits are applied for as part of an Associated Oil and Gas Activity application as detailed in Section 4.6 of this manual.
4.5.4 Road Specific Considerations for a Road Activity

Forest Service Roads

If the proposed road enters or affects a Forest Service Road right-of-way, or Ministry of Transportation and Infrastructure (MOTI) right-of-way, consent to carry out the approved activities must be obtained from the applicable agency before the project begins.

A road use permit (RUP) is required to use Forest Service Roads to carry out oil and gas activities. Where an RUP is not already held, one can be obtained by submitting an RUP application form in addition to applying for a road permit. Submit completed RUP application forms to RoadUsePermits@bcogc.ca. For additional information on road use permit administration, please refer to the road use permit tenure administration guidance document for oil and gas.

Road Use Requirements Applicable to all Oil and Gas Permit Holders

Permit holders must review and comply with OGRR:

- Part 4: outlines requirements related to road maintenance including: general and technical road maintenance, bridge maintenance, and limited maintenance related to temporary stoppage in road use.

- Part 5: sets out provisions and requirements including: right of access, limited application of the Motor Vehicle Act to oil and gas roads, speed restrictions, use and requirements related to traffic control devices, temporary closures, temporary restriction of access, removal of objects, and the use of oil and gas roads maintained by a road permit holder.

- Part 6: prescribes requirements for road permit holders in relation to road deactivation.
Use of Oil and Gas Roads Maintained by a Road Permit Holder

Section 21 of the OGRR establishes requirements related to use, notification and contribution to maintenance costs associated with using an oil and gas road maintained by a road permit holder:

- Providing Notice of Use to the road permit holder at least 14 days before the intended use will begin.

Upon receiving a notice of intended road use the road permit holder must provide to the permit holder providing the notice, an estimate of costs along with supporting data and records in relation to maintenance or any modifications necessary to accommodate the intended use of the permit holder, or to repair any damage caused by the user.

4.5.5 Road Activity Submission: Data Field Completion

Table 4-G below provides detailed instructions for each of the data fields requiring input (not auto populated) within the Application Management System.

Table 4-G: Application Instruction Table for the Roads Tab

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the activity within a previously assessed construction corridor</td>
<td>Indicate if the proposed activity falls within a previously assessed review corridor or previously assessed construction corridor.</td>
</tr>
<tr>
<td>Select applicable road application</td>
<td>Select the type of road application:</td>
</tr>
<tr>
<td></td>
<td>• New Road</td>
</tr>
<tr>
<td></td>
<td>• Transfer of Jurisdiction</td>
</tr>
<tr>
<td></td>
<td>• Transition Existing Non-Status Road to Permit</td>
</tr>
<tr>
<td></td>
<td>• Transition Existing Non-Status Road to Road Permit with Modifications</td>
</tr>
<tr>
<td><strong>Label</strong></td>
<td><strong>Instructions</strong></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Activity Description (Optional)</td>
<td>Provide a brief description of the project and any comments relevant to the road and/or application.</td>
</tr>
<tr>
<td>Maximum Right of Way Width (m)</td>
<td>Enter the maximum right of way width of the proposed road taking into consideration the width of any corner cuts.</td>
</tr>
<tr>
<td>Right-of-Way Rationale</td>
<td>Provide rationale explaining why the location for the chosen road right-of-way.</td>
</tr>
<tr>
<td>Select which surface access arrangement applies</td>
<td>For private land, indicate which surface access arrangements apply.</td>
</tr>
<tr>
<td>Rationale</td>
<td>Provide rationale explaining why the applicant is requesting a road permit over the road.</td>
</tr>
<tr>
<td>Have concerns been resolved with the other industrial maintainers of the road?</td>
<td>Indicate if concerns over the application brought forward by other industrial users of the road have been resolved.</td>
</tr>
<tr>
<td><strong>Road Segment Details</strong></td>
<td></td>
</tr>
<tr>
<td>Road Width (m)</td>
<td>Enter the proposed road width in metres to be constructed within the right-of-way.</td>
</tr>
<tr>
<td><strong>Roads Exemption and Deviation Requests</strong></td>
<td></td>
</tr>
<tr>
<td>Exemption from Oil and Gas Road Regulation:</td>
<td>Indicate if an exemption from the Oil and Gas Road Regulation is being requested.</td>
</tr>
<tr>
<td>Exemption From</td>
<td>Enter the section of the Regulation that is the subject of the exemption request.</td>
</tr>
<tr>
<td>Exemption Explanation</td>
<td>Provide a detailed explanation / rationale for the regulatory exemption request. Include statements indicating why the regulation cannot be followed, proposed alternate strategies and mitigation.</td>
</tr>
</tbody>
</table>
4.6 Associated Oil & Gas Activity Tab

Applicants applying for an associated oil and gas activity (AOGA) permit must complete the associated activity application tab in the AMS. The AOGA tab is made up of two components: AOGA details and AOGA land details.

This section includes an overview of AOGA permitting, guidance regarding associated activity planning and design, details related to AOGA specific application requirements and detailed instructions for completing the data fields within the AOGA tab.

For stand-alone Water Sustainability Act authorizations, rights holder engagement is required and the line list must be uploaded under the Rights Holder Engagement tab in AMS. For further information regarding rights holder engagement requirements, refer to Chapter 6.2 of this manual.

Please Note:

Associated activities include related activities previously applied for with the Crown Land Authorization Application Form and Aggregate Operations & Borrow Pit Application Form.

This manual is written as a whole and available to industry in sections to allow permit holders to access activity chapters. It is prudent of the permit holder to review the manual in its entirety and be aware of the content in other sections of the manual.
4.6.1 Associated Oil & Gas Activity Defined

Section 1 of Oil and Gas Activities Act (OGAA) defines oil and gas related activity as an activity:

- That, under a specified enactment, must not be carried out except as authorized under the specified enactment or that must be carried out in accordance with the specified enactment.
- The carrying out of which is required for or facilitates the carrying out of an oil and gas activity.

Specifically, AOGA are related activities which require the use of Crown land require an authorization under either the Land Act or the Petroleum and Natural Gas Act issued by the Commission. The Commission does not issue authorizations for associated oil and gas activities on private land.

Please Note:
The Oil and Gas Activities Act defines both oil and gas activity and related activities and the Commission adheres to the definitions. The Commission’s glossary and acronym listing is an extension of this manual and defines terms used throughout the oil and gas activity. Applicants and permit holders should refer to the glossary to understand the exact definition of terminology as it may differ from other regulatory bodies. Due diligence is required to ensure proper understanding of terms, acronyms and legislation.

In accordance with Section 24(3) of OGAA:

- The Commission may not grant an authorization to a person for a related activity unless the person holds, or has applied for, a permit for the oil and gas activity related to that activity.

Applications for Crown land use for activities unrelated to oil and gas are submitted to Front Counter BC. For some AOGA, such as Investigative Use, the Commission may grant authorizations without the existence of a primary oil and gas activity permit or application where it has delegated authorities to do so. Contact the appropriate Authorizations Manager for more information.
Approved AOGA applications receive an authorization under Section 138 of the Petroleum and Natural Gas Act or Section 39 of the Land Act, which generally expires after two (2) years from the date of issuance if the activity has not begun. If the activity is carried out prior to two years from the date of issuance, the authorization remains active for so long as required. Any subsequent tenure renewals will be issued by the Commission, as required.

**Associated Oil and Gas Activity Intended Land Use Types**

Associated oil and gas activity applications can be submitted for several intended land use types, including:

- Access
- Above ground fresh water line
- Aggregate / Borrow Pit
- Airstrip
- Campsite
- Cathodic Protection Anode Bed
- Communication site
- Deck site
- Fresh water storage site
- Gate monitoring site
- Helipad
- Investigative use – General
- Investigative use – Water source well testing
- Monitoring site
- Powerline
- Site remediation Staging area
- Storage area
- Sump
- Water source dugout
4.6.2 Creating an Associated Oil & Gas Activity Application

Associated oil & gas activities can be applied for independently, but also can be combined in a multi-activity application along with the primary activity. The Commission encourages multi-activity applications wherever practicable, especially when additional authorizations are required in relation to the associated oil & gas activity.

Amendments

An amendment may be used for the addition of associated oil and gas activities and / or for the modification of existing associated oil and gas authorizations. The application must include a clear description of the changes in the amendment application description box. Any changes must also be highlighted on the associated construction plan.

4.6.3 Associated Oil & Gas Activities Planning & Design

This section provides guidelines and considerations when planning and designing associated oil and gas associated activities. The standards and guidelines presented here form a substantial basis for assembling an application. The Commission reviews the associated oil and gas activities application relative to the technical information provided in the Application Management System; therefore, applicants should review this section for an indication of any application requirements or attachments required in relation to the required components.
4.6 Completing Activity Details: Associated Oil and Gas Activity

Regulatory Requirements

Associated oil and gas activities must meet the design and operational requirements outlined in the Oil and Gas Activities Act (OGAA), the Land Act and the Petroleum and Natural Gas Act.

If an exemption is requested from regulatory requirements, an exemption must be applied for at the time of application, and must include:

- Specific regulatory provision requiring an exemption.
- Rationale for exemption (explanation of why an exemption is required).
- Proposed plan showing mitigation strategies to reduce impacts.

The exemption request must demonstrate that it is not reasonably practicable for the activity to comply with the regulatory requirements, and must be reviewed and approved by the Commission.

Guidance Requirements

By policy, the Commission applies the tests and principles of the Environmental Protection and Management Regulation (EPMR) to AOGA applications. Refer to the Environmental Protection and Management Guide (EPMG) for more information regarding how the Commission considers the identified values.

If oil and gas activities cannot be carried out in accordance with the guidance recommendations in this chapter and in the EPMG, then a rationale must be included in the permit application. The rationale must include specifics of the guidelines not followed, an explanation of why they cannot be followed, as well as outline any planning strategies or operational measures that have been or will be implemented to mitigate impacts on the associated value.
4.6.4 Associated Oil & Gas Activity Specific Activity Requirements

This section outlines application requirements for AOGA applications. Requirements are dependent on the characteristics of the associated activity and are outlined in more detail below including a description, details of additional information and requirements. In most cases, the details are input into the associated activity application tab, but may require the upload of an attachment to support the details. A rationale text box may be indicated as optional in AMS, this is not because the submission of the rationale itself is optional. However, the option to include the rational in the associated text box is optional rather than uploading a more comprehensive rationale as an attachment. Attachments must meet specific size and file formatting restrictions in order to be uploaded correctly as defined in Section 5.8 of this manual.

Please Note:

Applications submitted without appropriate rationales will be subject to processing delays while the Commission waits for the required application deliverables.

Aggregate / Borrow Pits

The Ministry of Energy and Mines has delegated limited authorities to the Commission to authorize aggregate operations under the Mines Act. Applicants should indicate whether, in their assessment, if a Mines Act Permit is required. The aggregate operation/worksite borrow pit categorization key provided in Appendix E illustrates the difference between an aggregate operation, and an oil and gas aggregate operation and a worksite borrow pit.

Worksite borrow pits are defined as an excavation of clay, gravel, rock, shale, sand or soil used solely for the construction of the related oil and gas infrastructure. Worksite borrow pits are temporary in nature and permission to further excavate material is considered spent on the completion of construction of the associated oil and gas infrastructure. Work in and around a worksite borrow pit is subject to WorkSafeBC regulations.
Oil and Gas Aggregate Operations

Oil and Gas Aggregate Operations are an excavation of shale, gravel, rock, or sand used for the construction or maintenance of oil and gas infrastructure that does not meet the criteria for a worksite borrow pit.

Criteria considered in determining oil and gas aggregate operations for the proposed pit include:

- Size of proposed pit (is it greater or less than 3 ha).
- Life of proposed pit (is it needed for more than 2 years).
- Development of a bench.
- Volume extraction is greater than 25,000 tonnes per year.
- Blasting that involves processing of aggregate.

These criteria are a general guideline for determining when an applicant must apply for an Oil and Gas Aggregate operation; if there are questions about the categorization of the worksite borrow pit / aggregate operation please contact the appropriate Commission Authorizations Manager.
Please Note:

Oil and Gas Aggregate Operations considered by the Commission include only the excavation or quarrying of aggregate that:

- produce material solely for the construction and maintenance of oil and gas infrastructure;
- is not located within a construction corridor;
- does not produce materials for sale to or use by any party other than for the permit holder, or the holder of an approval referred to in Section 9 of OGAA, with authorization for its use;
- does not produce sand for use in hydraulic fracturing; and
- is subject to the requirements of the Health, Safety, and Reclamation Code for Mines in British Columbia.

Applications for aggregate operations, whether for oil and gas purposes or not, that do not meet the above criteria, must be submitted directly to the Ministry of Energy and Mines. If there are associated Land Act authorizations required, the Commission remains responsibly for adjudication of those.

All oil and gas aggregate operations are considered a mining activity under the Mines Act and are subject to the requirements of the Health, Safety and Reclamation Code for Mines in British Columbia. WorkSafeBC regulations do not apply.

An oil and gas aggregate operation requires a Mines Act Permit in addition to a License of Occupation under Section 39 of the Land Act to occupy and use Crown land. As per the Health, Safety and Reclamation Code for Mines in British Columbia, all Mines plans, including programs for reclamation and closure, must be updated at a minimum of 5 years upon commencement of activity.

Applications for an oil and gas aggregate operation must include a mine plan and mine emergency response plan as follows:

**Mine Plan must include:**

- Project description.
  - a) Kind of aggregate material (clay, shale, gravel, rock, sand).
  - b) Purpose – proposed use of material.
  - c) Proposed start/end dates.
d) Identification of the Mine Manager appointed under Section 21 of the Mines Act (name and contact information).

e) Timing of activities (continuous, seasonal, intermittent).

f) Description of proposed work.

g) Activities and estimated disturbance:
   - List any access roads / Trails / Heli Pads / Air Strips, including area of disturbance.
   - Description of Sand, Gravel and Quarry Operations, including area for each activity:
     - Excavation of Pit Run.
     - Crushing.
     - Mechanical Screening.
     - Washing.

h) Settling Pond - provide the number of settling ponds, area of disturbance, and how the water will be disposed of (Recycled / Exfiltrate to ground / discharge to environment).

i) The estimated total mineable reserves over the life of the mine (tonnes).

j) The estimated annual extraction of material from site (tonnes/yr).

k) The estimated volume of timber to be cleared (m$^3$).

l) Equipment list.

m) Blasting/rock crushing requirements (if any).

- Site condition:
  a) Application area description (Forest composition, hydrology, geology, etc.).

  b) Description of surrounding development.

- Engineering design & construction:
  a) Mine location and size.

  b) Site Preparation:
     - Description of stripping overburden.
     - Overburden management: storage location, height and slope, etc.
c) Pit slopes.
d) Perimeter berms.
e) Depth of groundwater table.
f) Proposed access and exit point.
g) Drainage exit locations.
h) Mine development maps and cross sections indicating:
   • Depth.
   • Length/width of open pit area.
   • Length/width of total project area.
   • Slope ratios.
   • Setback areas with measurements.
   • Overburden storage area with dimensions.
i) Erosion and sediment control.
j) Vegetation management strategy.
k) Reclamation plan.

**Blasting Plan**

A blasting plan should be included with the application if blasting is to be carried out to extract materials from the proposed pit. The blasting plan should include a map showing the existing infrastructures adjacent to the proposed site. The proponent should submit justification that the integrity of these infrastructures will not be impacted from blasting. The plan must be submitted by a qualified professional.

**Mine Emergency Response Plan**

Guidance on the development of a Mine Emergency Response Plan is available online from the Ministry of Energy and Mines.

**Royalties Payable on Aggregate Material Mines**

Aggregate volumes removed from a worksite borrow pit and from an oil and gas aggregate operation may be subject to the payment of royalties to the Ministry of

Development and Reclamation Plan Requirements

Borrow pit and aggregate operations activities must be reclaimed in accordance with the reclamation plan. The following development and reclamation plan requirements must be prepared by a qualified professional.

- Plan view (map) of proposed development featuring:
  1. Topographic features.
  2. Property boundaries.
  3. Watercourses and drainages on the property and within 150 metres of the boundaries.
  4. Final boundaries and proposed excavation.
  5. Access roads.
  6. Access to public roads.
  7. Proposed stockpiles (e.g., topsoil, overburden, product, etc.)
  10. Fencing and berms.

- Cross sections of proposed development illustrating:
  1. Original land surface.
  2. Typical configuration during mining, indicating the angle of slope and bench locations, if applicable.
  3. Proposed configuration upon completion of reclamation.

- Plan on the progressive development and reclamation of the aggregate operation/borrow pit:
  1. Describe the progressive development of the aggregate operation/borrow pit and reclamation plan.
  2. Describe the backfilling materials and placement procedures.
  3. Excluding lands not reclaimed. The average land capability to be achieved on the remaining lands must not be less than the average existing prior to the activity.
4. Land, watercourses and access roads must be left in a manner ensuring long-term stability.

5. Re-vegetated lands to a self-sustaining state using appropriate plant species.

6. Re-vegetated lands so the growth medium must satisfy land use, capability, and water quality objectives. All surficial soil materials removed must be saved for use in reclamation programs, unless the objectives are otherwise achieved.

7. Land and watercourses must be reclaimed in a manner consistent with the adjacent landforms where practicable.

- Prior to abandonment:
  1. All machinery, equipment and building superstructures must be removed.
  2. Concrete foundations must be covered and re-vegetated.
  3. All scrap material must be disposed of in a manner acceptable to an inspector.

**Fresh Water Storage Sites**

Under the *Water Sustainability Act* (WSA), the storage of water from a groundwater source or a stream (which includes a lake, pond, river, creek, spring, ravine, gulch, wetland or glacier) requires an authorization. In addition, structures constructed for water storage above natural grade elevation behind a berm or a barrier (i.e., “live storage”) are dams under the *Dam Safety Regulation* (DSR) and require compliance with the construction and operational standards specified by the Ministry of Forests, Lands and Natural Resource Operations & Rural Development (FLNRORD). Water storage behind a dam may also require a water licence.

Applicants for the use of Crown land for the construction and operation of a Freshwater Storage Site are required to provide the following information to the Commission, in addition to what is specified for a standard Crown land application:

- Type of proposed water storage infrastructure planned for the site (e.g. c-rings, tanks, earthen excavation, etc.).
- Should the water storage involve a berm or barrier, provide the:
  - Proposed maximum height of any berm or barrier above native grade elevation that enables the storage of water.
4.6 Completing Activity Details: Associated Oil and Gas Activity

- Total proposed water storage volume (cubic metres, m\(^3\)).
- Total proposed "live storage" volume (m\(^3\)). Live storage is calculated as the volume of water stored above native grade elevation behind a berm or a barrier that would be released by a failure of the berm or barrier.
- If the structure is a dam other than a minor dam, provide the anticipated classification of the dam, following the approach detailed in Schedule 1, Section 2, of the DSR.

Applicants are required to provide the above noted information in the Activity Description box, or attach a document providing the above-noted information to any associated oil and gas activity application for a freshwater storage site submitted through the Commission’s AMS.

**Dam Safety Regulation**

Under the Dam Safety Regulation (DSR), a "dam" means a barrier constructed for the purpose of enabling the storage or diversion of water from a stream or aquifer.

The DSR creates three categories of dams (refer to Figures 4.B and 4.C below):

1. **Minor dams**: Section 2 of the DSR specifies minor dams as:
   - Less than 7.5 m in height; and
   - Capable of impounding at full supply level a maximum total live storage volume of 10,000 m\(^3\) or less.

   Minor dams are exempted from the DSR, except in situations where the Comptroller or Water Manager believes the dam is potentially hazardous to public safety, the environment, or land or other property.

2. **All dams**: except minor dams, must comply with all parts of the DSR except Part 3, which only applies to certain large dams.

3. **Large dams**: All parts of the DSR including Part 3 apply to certain "large" dams or dams with a significant or higher consequence classification. The regulatory requirements for dams to which Part 3 of the DSR applies are more substantial. These dams meet one or more of the following criteria:
   - 1 m or more in height, and live storage of >1,000,000 m\(^3\).
The construction, operation, maintenance, surveillance and decommissioning of any Freshwater Storage Site that is a dam under the DSR must be consistent with the DSR and the ministry of Forests, Lands and Natural Resource Operations & Rural Development (FLNRORD) dam safety guidelines. Applicants should refer to the FLNRORD Dam Safety Program for detailed information.

Where the proposed Freshwater Storage Site is a dam, except for minor dams, applicants are required to:

- Follow FLNRORD’s requirements specified in the Plan Submission Requirements for the Construction and Rehabilitation of Dams;
- Complete and submit required plans and other information for the proposed dam to:
  - Dams <9 metres in height - FLNRORD Regional Operations (Prince George).
  - Dams ≥9 metres in height - FLNRORD Dam Safety Section (Victoria).
- Obtain “leave to commence construction” from FLNRORD prior to the construction of any live storage potential for the dam.
- Comply with the DSR for the construction, operation, monitoring, maintenance, and removal etc., of the dam.
- Contact the appropriate Dam Safety Officer if assistance is required.
Figure 4.B: Application of the Dam Safety Regulation to Dams in British Columbia

ENTIRE REGULATION applies to dams that fall in the blue area, EXCEPT...

LOW Consequence Classification dams that fall below the dashed line are EXEMPT from PART 3 of the REGULATION

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1. Dam Safety Regulation 43/2010, Part 1, Section 2
2. Dam Safety Regulation 43/2010, Part 3, Section 7
Figure 4.C: Examples of Water Storage Sites that are Dams or not Dams

**Authorization to Store Water**

All Freshwater Storage Sites storing water from a stream or a groundwater source require authorization under the WSA for the storage. Section 3(2) of the Water Sustainability Regulation stipulates that a short-term use approval cannot be used to authorize water storage by a dam to which Part 2 of the DSR applies, unless the dam is authorized by a water licence. Oil and gas operators who are proposing to store water from a stream or from a groundwater source in a
Freshwater Storage Site can obtain the storage authorization in either of two ways:

1. Where the Freshwater Storage Site is a dam, except for a minor dam, the water storage must be associated with a water licence. Should an operator already have a water licence, it may be possible to amend the licence to add additional works to the licence, including a dam used to create the storage. Should an operator not have an existing water licence, the operator is required to apply for and obtain a water licence before a dam enabling live storage of water is constructed. Water licence applications are made to the Commission using the online application portal.

2. Where the Freshwater Storage Site is a minor dam, or is an earthen excavation that is not a dam (i.e., with no live storage), authorization for water storage can be provided either with a short term use approval (Section 10 of the WSA), or with a water licence.

**Environmental Assessment Act Requirement**

Under Part 5 of the Reviewable Projects Regulation, a Freshwater Storage Site that is a dam with a berm height that equals or exceeds 15 metres is a reviewable project under the Environmental Assessment Act. The operator must contact the Environmental Assessment Office to determine whether an Environmental Assessment Certificate is required.

**Equipment Storage Sites**

The Commission may authorize oil and gas operators to use land for the purposes of temporarily storing equipment that is not currently in use on operating areas. This will generally be for centralizing equipment that is in transition in preparation for sale, alternate use or recycling. The Commission will consider applications for this type of storage site under the following conditions:

- The proposed storage area must be located on an existing disturbance. The Commission will not authorize new cut for the storage of aged equipment.

- Authorization terms will be limited to a maximum of five years.

- The application must include an explanation of what measures will be taken to ensure the site is restored to the standard of Section 19(1) of the EPMR prior to permit expiry.
4.6.5 Additional Considerations for Associated Oil & Gas Activities

Approvals from Other Jurisdictions for Camps

The Commission may authorize oil and gas operators to use land for the purposes of a camp; however, additional authorizations and permits are required from other jurisdictions to construct and operate a camp. For more information refer to the Approvals from Other Jurisdictions for Camps Guidance Document.

The Peace River Regional District (PRRD) plans for potential impacts on services and infrastructure resulting from the operation of worker camps within the PRRD boundaries. Those camps that will house more than 30 workers are of particular interest, and permit holders with camps that meet that threshold will be required to provide such information annually to the regional district. For more information refer to PRRD website: [http://prrd.bc.ca/services/planning/development-applications/](http://prrd.bc.ca/services/planning/development-applications/)

The camp capacity must be included in the Application Description within AMS.

4.6.6 Associated Oil and Gas Activity Submission: Data Field Completion

Table 4-H below provides detailed instructions for each of the data fields requiring input (not auto populated) within the Application Management System.

Table 4-H: Application Instruction Table for the Associated Oil and Gas Tab

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is one or more of the associated activities within a previously assessed construction corridor?</td>
<td>Indicate if the proposed activity falls within a review corridor or construction corridor previously assessed as part of the related oil and gas activity application</td>
</tr>
</tbody>
</table>
### Label | Instructions
--- | ---
Related Primary Activity Type | Select the type of related primary activity. The primary activity must be the oil and gas activity to which the associated oil and gas activity is related.

File XREF Number | Provide the XREF number of the related primary activity.

No File XREF Rationale | If no file XREF number exists, provide rationale that clearly indicates how the authorization being applied for relates to an oil and gas activity.

### Aggregate Operation/Borrow Pit Summary

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Material</td>
<td>Select the type(s) of material planned to be recovered from the aggregate operation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intended Purpose</td>
<td>Select how the material recovered from the aggregate operation will be used in oil and gas activity.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of Work</td>
<td>Select the description of the work to be conducted.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed Start Date</td>
<td>Enter the proposed construction start date for the aggregate operations.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed Completion Date</td>
<td>Select the proposed date the operations are expected to finish and reclamation activities begin.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Annual Extraction (tonnes)</td>
<td>Estimate the amount to be extracted each year, in tonnes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Total Reserves of Life</td>
<td>Estimate the total reserves of the activity in tonnes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
</table>
| Development & Reclamation Plan | A Development or Mines Plan is a mandatory requirement if one/any of the Aggregate Operations is greater than 3ha or is located outside of the construction corridor. The plan should indicate how the site will be developed for the purposes of material extraction and how the site will be reclaimed.

If, in consultation with a Commission Authorizations Manager, it has been determined that the development is not a mine but is greater than 3 ha, provide written confirmation from the Authorizations Manager under the Development and Reclamation Plan upload button. If the development is clearly a worksite borrow pit, but no construction corridor was included with the application, provide an explanation or rationale as the
<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>attachment under the</td>
<td>development and reclamation plan upload button.</td>
</tr>
<tr>
<td>Emergency Response Plan</td>
<td>An emergency response plan is a mandatory requirement if one or any of the aggregate operations is greater than 3ha or is located outside of the construction corridor. If, in consultation with a commission authorizations manager, it has been determined that the development is not a mine but is greater than 3ha, provide written confirmation from the authorizations manager under the ERP upload button. If the development is clearly a worksite borrow pit, but no construction corridor was included with the application, provide an explanation or rationale as the attachment under the ERP upload button.</td>
</tr>
<tr>
<td>General Description</td>
<td>Provide a description of any investigative use work planned, including purpose, duration and methods.</td>
</tr>
<tr>
<td>Water Well Testing Depth</td>
<td>Provide the proposed water well testing depth, if &gt; 300m, submit a new well application.</td>
</tr>
</tbody>
</table>
4.7 Short-term Water Use

Access to divert, store and use surface water or groundwater for oil and gas activities is obtained through either a use approval or a water licence, issued under Section 10 or 9, respectively, of the Water Sustainability Act (WSA). Applicants applying for a use approval must complete a Short-term Water Use application in the Application Management System (AMS). A Short-term Water Use application is made up of two tabs: Short-term Use of Water Overview and Points of Diversion Details.

Applications for water licenses cannot be submitted through AMS. Information and guidance related to the water licence application process is available in the Commission’s Water Licence Application Manual.

The Commission and FLNRORD co-manage water resources on the landbase. The Commission is responsible for any authorizations issued to oil and gas operators that are required to facilitate the carrying out of oil and gas activities. FLNRORD is responsible for authorizations issued to anyone other than an oil and gas operator, even if the authorization is associated with the carrying out of an oil and gas activity. The Commission’s Water Sustainability Act Requirements for Accessing Water on Private Land document clarifies WSA authorization (both use approvals and water licenses) responsibilities for applicants in pursuit of WSA authorizations on private land, and which agency should receive the application.

This section includes an overview of short-term water use permitting, guidance regarding short-term water use planning and design, details related to short-term water use specific application requirements and detailed instructions for completing the data fields of a short-term water use application.
Please Note:
This manual is written as a whole and available to industry in sections to allow permit holders to access activity chapters. It is prudent of the permit holder to review the manual in its entirety and be aware of the content in other sections of the manual.

4.7.1 Short-term Water Use Defined

Short-term water use for oil and gas development is a type of related activity, as defined in OGAA. Through OGAA, the Commission is empowered to grant authorizations under specified provisions of the Water Sustainability Act.

In accordance with Section 24(3) of OGAA:

- The Commission may not grant an authorization to a person for a related activity unless the person holds, or has applied for, a permit for the oil and gas activity related to that activity.

- For short-term water use related to major projects, prior to application for an oil and gas activity related to the project, the Commission may grant authorizations without the existence of a primary oil and gas activity permit or application where it has delegated authorities to do so. Contact the Commission’s Major Projects team for more information.

Applications for use approvals are submitted as either stand-alone, or in combination with primary activity applications. If applying for a stand-alone authorization, a cross-reference number for a related primary activity is required at the time of application in order to verify the applicant criterion is met. Short-term water use approvals are applied for as either stand-alone, or in combination with primary activity applications.

By regulation, short-term water use approvals may be issued for a term not exceeding 24 months. The expiration date is noted on the approval.

A use approval cannot be amended to extend the term beyond 24 months from issuance of the original authorization. Where short-term water use is required beyond the 24 months, applicants must submit a new application to the Commission and are required to provide the previous Application Determination.
number, Short-Term Water Use activity identifier, or Legacy OGC Number in the
details section of the point of diversion activity tabs.

If activities have not started by the end of the permit term, the authorization
expires, and the applicant must re-apply to the Commission for a new use
approval in order to use water.

4.7.2 Creating a Short-term Water Use Application

There is one type of short-term water use activity: Point of Diversion. Applicants
select the short-term water use activity type in the “create application” screen of
AMS.

Point of Diversion Application

A short-term water use approval is required for water withdrawals from pre-
defined points of diversion (POD). Applications can be made for single or multiple
points of diversion. Points of diversion include rivers/streams, lake/ponds, and
water source dugouts.

Short-term Water Use Applications

A short-term water use approval is required for any water to be diverted, used, or
stored for the purpose of an oil and gas activity. New short-term water use
authorizations are also required to:

- Continue water use where a pre-existing use approval has expired.
- Divert, store or use water from a new diversion point.

Short-term Water Use Authorization
Amendments

Approval of an authorization amendment is required before the associated use
can be carried out. Amendments for short-term water use authorizations are
required for:

- Adding or changing diversion points.
• Changing the length of the approval (up to 24 months from the approval’s effective date).

• Any other changes to permit provisions.

By regulation, increases to authorized volume withdrawals (daily or total) cannot be submitted as an amendment unless they were erroneously estimated. Changes in volume require a new short-term water use application to be submitted to the Commission.

When submitting amendments to a short-term water use approval, the following additional deliverables are required:

• A letter explaining the amendment and why it is required.

**Short-term Water Use Policy**

The Commission’s authorization of short-term water use approvals is consistent with the provisions of the Water Sustainability Act. The duration of a use approval cannot exceed 24 months. Upon the expiration of a use approval, subsequent applications for authorizations are reviewed and adjudicated as new applications.

In some instances, oil and gas operators require water licences issued by the Commission including:

• Where a company proposes to construct permanent water infrastructure (e.g., a pipeline) as part of its water supply strategy.

• Where a company requires assurance of long-term water access through the “first in time, first in right” principle of the Water Sustainability Act.

• When a company proposes to divert surface or groundwater into a structure that is a regulated dam under the Dam Safety Regulation.

**Water Storage**

Authorization is required for the storage of water diverted under a short-term water use approval. Storage is not currently available as an option in AMS, therefore, where the applicant is applying for a section 10 use approval and is
intending to store the water before and during use, the applicant is required to provide the following information pertaining to the storage:

- A table listing the location(s) of all water storage sites, with UTM coordinates and/or other location identifiers;
- A map depicting the location(s) of all water storage sites;
- Type of water storage (tank, c-ring, earthen excavation);
- The total volume of water to be stored;
- If water storage is on Crown land, the associated Crown land authorization for the freshwater storage site;
- If water storage is on private land, the name of the landowner and the PID of the private land;
- For all proposed water storage involving earthen excavations provide:
  - Total water storage volume (m$^3$);
  - Maximum height of any berm or barrier above native ground elevation, if the excavation has a berm;
  - Maximum “live water storage” volume (m$^3$), if the excavation has a berm or barrier. (Live storage is calculated as the volume of water stored above native ground elevation behind a berm or barrier);
  - If the water storage is associated with a water licence, the water licence number.

Under the Water Sustainability Act, the Commission cannot authorize in a use approval the storage by a Dam to which Part 2 of the Dam Safety Regulation applies (this is any water storage reservoir with live storage volume of 10,000 m$^3$ or more). All storage of water in a Dam to which Part 2 of the Dam Safety Regulation applies must be authorized with a water licence.

In specific circumstances, the Commission may authorize a use approval from a regulated dam. Generally, this would be in cases where the water level needs to be lowered to facilitate dam remediation, or in the interest of public or environmental safety. Contact the appropriate Authorizations Manager to discuss specific circumstances related to use approvals and regulated dams.
Environmental Flow Assessment

The Commission applies environmental flow assessment and determination to decisions for short-term water use, consistent with Section 15 of the Water Sustainability Act. The environmental flow needs of any stream or aquifer where water is proposed to be withdrawn, as well as the environmental flow needs of any proximal stream or aquifer that is hydraulically connected to the primary source must be assessed. In situations where hydraulic data is available from the North East Water Tool, the North West Water Tool or the Omineca Water Tool, these tools can be utilized to assess the environmental flow needs of the primary source. If no data is available from these tools the environmental flow needs of the primary source as well as the environmental flow needs of any hydraulically connected streams or aquifers must be assessed by a qualified professional and a report submitted to the Commission with their short-term water use application.

For proposed water withdrawals from water storage sites or water source dugouts that are potentially hydraulically connected to any streams, lakes or W2 wetlands (e.g., within 50-100 metres) and where the applicant is proposing to withdraw more than 1 pit volume per year, the applicant must assess the hydrologic connectivity and determine whether a hydraulic connectivity exists and the extent of any hydraulic connection. Unless the applicant can demonstrate otherwise, the Commission will assume hydraulic connection to any waterbody within a reasonable (generally 50-100 metres) distance of the source. If hydraulically connected, the application must also include an assessment of the environmental flow needs of the proximal stream, lake or W2 wetland completed by a qualified professional.

If the application relates to water in an aquifer the applicant is required to provide the official names of each stream or other aquifers known to the applicant to be reasonably likely to be hydraulically connected to the source aquifer, or if there is no official name, a location description of each stream or aquifer.

Please be aware that the Water Sustainability Act gives the decision maker the discretion to request any additional information he or she may deem necessary for a determination to be made on the application.
Cancellation and Expiration to Short-term Water Use Approvals

If a permit holder decides not to use water from an active use approval, the permit holder must submit a letter requesting cancellation of the authorization to the Authorizations Manager of the Commission operational zone in which the POD is located. The cancellation request letter must clearly identify:

- Application Determination and Short-Term Water Use numbers.
- Point(s) of diversion.
- Whether or not any water withdrawal has occurred to date.

Water Source Details

Water source types must be identified when creating a short-term water use application. Applicants must determine and select the purpose, quantity, source of water and the works required.

The Water Sustainability Act vests “the water at any time in a stream” and the “percolation and flow of groundwater” to the Crown. Under the Water Sustainability Act, all groundwater is considered to be from an “aquifer”.

Groundwater is defined as “water naturally occurring below the surface of the ground”.

An aquifer is defined as:

-“(a) a geological formation,
(b) a group of geological formations, or
(c) a part of one or more geological formations
that is groundwater bearing and capable of storing, transmitting and yielding groundwater.”

Definitions for water source types include:

- Lake/pond: a body of relatively still fresh water, localized in a basin. Lakes and ponds are contrasted with rivers or streams, which normally flow. There are no universally accepted criteria to distinguish ponds from lakes, however, as general guidance; ponds can range in size from a
few square metres to approximately two hectares, while lakes are generally larger than two hectares. Most lakes are filled and drained by rivers and streams. Ponds can include man-made features. Over time, some pits constructed originally as borrow pits can evolve to develop natural vegetation and habitat characteristics, and become classified as ponds. Lakes and ponds are both “streams” as defined in the Water Sustainability Act.

- River/stream: a natural watercourse of freshwater flowing towards an ocean/sea, lake or other river, sometimes flowing towards the ground and drying up prior to reaching another water body. Small rivers may also be called by several other names, including stream, creek, brook, rivulet, tributary, rill and “crick”. A stream in this manual specifically refers to a stream as defined in the Water Sustainability Act, which includes: a lake, pond, river, creek, spring, ravine, gulch, wetland (swamp, marsh or fen) or glacier, whether or not usually containing water, including ice.

- Water source dugout: created when a pit or other earthen excavation is used as a source of water that has naturally accumulated water via snowmelt, rainfall, or groundwater inflow. The water in water source dugouts is predominantly sourced from the percolation and flow of groundwater, and the Commission administers water source dugouts as sourced via “aquifers” under the Water Sustainability Act.

### 4.7.3 Short-term Water Use Planning & Design

This section provides typical planning and design requirements, guidelines and considerations when planning and designing for short-term water use for an oil and gas activity application. The standards and guidelines presented here form a substantial basis for assembling an application. The Commission reviews the short-term water use application relative to the engineering and technical information provided in the Application Management System; therefore, applicants should review this section for an indication of any application requirements or attachments required in relation to the required components.
Regulatory Requirements

Short-term water use activities must comply with the requirements outlined in the [Water Sustainability Act](https://www.gov.bc.ca/eng/environment/water/sustainability/) and its regulations, including the [Water Sustainability Regulation](https://www.gov.bc.ca/eng/environment/water/sustainability-regulation/), the Groundwater Protection Regulation and the Dam Safety Regulation.

The Commission does not grant exemptions under the Water Sustainability Act. However, some relevant activities are exempted by regulation from requiring authorization under the Act to divert and use water. Specifically, the exemption for well drilling as it pertains to geotechnical investigations specified in Part 4 of the Water Sustainability Regulation. Under this Part, use approvals are not required for geotechnical or geophysical drillings as long as (among other restrictions as specified in this Part):

- The water diversion is done by or supervised by a professional engineer or professional geoscientist licensed or registered under the Engineers and Geoscientists Act, or a qualified well driller as per Section 7 (a) (1) of the Groundwater Protection Regulation, for geotechnical or geophysical exploration wells,
- The proponent does not divert water from any one location on a stream or aquifer for than 5 consecutive days,
- The proponent does not divert water from a stream or aquifer for more than 10 days in any calendar month,
- The proponent does not divert more than 10 m³ of water per day from a stream or aquifer,
- The proponent does not divert or use water from a wetland,
- The proponent does not divert or use water from a stream that is within the boundaries of a protected area,
- The proponent does not divert or use water from a stream, other than a lake, unless the width of the flowing water in the stream channel is at least 5m at surface level,
- The proponent does not divert or use water from a lake unless the surface area of the lake is at least one hectare.
4.7 | Completing Short Term Water Use Activity Details

Guidance Requirements

In addition to this Oil and Gas Activity Application Manual, short-term water use applicants should review the following:

- Environmental Protection Management Guideline.
- Wildlife Act requirements to leave muskrat and beaver houses and dens undisturbed.

Additionally, the following operational requirements must be planned for and met:

- End-of-pipe intakes must contain a screen with a mesh size not exceeding one-tenth of an inch. Additional information can be found in the [Department of Fisheries Freshwater Intake End-of-Pipe Fish Screen Guideline](#).

Water Supply Verification (NorthEast, NorthWest and Omineca Water Tools)

When making an application for short-term use of water from specific points of diversion, applicants are required to indicate that sufficient water supply has been verified. Before submitting an application to the Commission, applicants are required to utilize the [NorthEast Water Tool (NEWT)](#), the [NorthWest Water Tool (NWWT)](#) or the [Omineca Water Tool (OWT)], as applicable, to assist in understanding the water supply within the watershed of the proposed water source and in determining whether water is likely to be available for permitting at the POD within the watershed of the proposed water source.

Reports generated from NEWT, NWWT, or OWT provide information on monthly runoff, environmental flow requirements, existing licenced or approved use, and potentially available water. Applicants are required to use the generated reports and submit these reports with all short-term water use applications for streams and lakes where data from these tools is available. If no data from these tools is available, the required hydrological data must be submitted by a qualified professional with the short-term water use application. The Commission's water information webpage provides detailed information on the use and limitations of NEWT. NEWT is not useful for estimating the annual or seasonal runoff into water source dugouts.
Where stream flow measurements exist, such as from the Water Survey of Canada or industry-specific measurement sites, applicants are encouraged to supplement the water tool analysis with data from these sources. In addition to the online Water Tools, the Commission makes available the Water Portal, which provides access to available hydrometric and climate data.

**Water Sources with Water Allocation Restrictions**

Some water sources (rivers, lakes, springs) in northeast BC are noted by the Ministry of Environment (MOE) and Ministry of Forests, Lands and Natural Resource Operations & Rural Development (FLNRORD) as having Water Allocation Restrictions. A Water Allocation Restrictions map layer is contained in the Commission’s GIS coverage titled Areas Established by the Commission. Industry is advised when a Point of Diversion (POD) application is located within a source specified as having a Water Allocation Restriction via the Application Analysis Tool Report, or the SOE (Spatial Engine Overlay) Report. An applicant for sources specified as having a Water Allocation Restriction is required to submit additional information to support the application.

A Water Allocation Restriction alerts water users and Commission staff of current or potential water allocation concerns. This information is considered by the Commission, along with all other relevant information, when making short term water use decisions.

Three types of Water Allocation Restrictions are noted in the Commission’s map coverage:

- **Fully Recorded** indicates that the source has water shortages and that water for further allocations may be limited, seasonally limited, or not available.

- **Possible Water Shortages** indicates that the stream is nearing the Fully Recorded stage and there is potential for periods of insufficient water availability.

- **Office Reserve** indicates that a specialized comment has been placed by MOE/FLNRORD on the source that must be taken into consideration for further water allocation decisions.
As per Section 12.1.b.iii (Application and Decision Maker Initiatives) and Section 15.1 and 15.2 (Environmental Flow Needs) of the Water Sustainability Act, the Commission requires that an application for water diversion from a source specified as having a Fully Recorded or Possible Water Shortage status include a hydrological report to support the application. The hydrological report will:

- Be produced by a qualified professional;
- Provide detailed information on daily, weekly, monthly, seasonal and annual runoff and discharge for the source, derived from analysis of long-term stream flow data associated with the source or from simulations based on long-term hydrology data;
- Document existing authorized water diversions on the source, and quantify the extent by which existing diversions affect daily, weekly, monthly, seasonal and annual discharge at the POD;
- Document fisheries utilization of the water source at and downstream of the POD, and the Environmental Flow Needs of the source to maintain fish resources, where the Water Allocation Restriction is associated with fisheries or environmental flows;
- Document community or domestic drinking water use and other licensed water diversions at and downstream of the POD, where the Water Allocation Restriction is associated with maintaining community or domestic drinking water supply or another existing licenced water use.
- Make recommendations for rates and thresholds of daily, weekly, monthly and seasonal water diversions based on the application of an accepted Environmental Flow Needs procedure such that the factors triggering the Water Allocation Restriction specification are addressed. The Commission is familiar with and supports the use of the Desktop Method for Establishing Environmental Flows in Alberta Rivers and Streams.\(^1\)

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Approvals for water diversion from sources specified as Fully Recorded or Possible Water Shortage will generally include special permit conditions, including:

- Discharge monitoring before and during diversion (which can include Water Survey of Canada stations, if available);
- Specified Environmental Flow Needs thresholds linked to discharge monitoring, below which water diversion will not occur.

**Authorizations for Crown Land Access and Associated Developments**

A short-term water use approval alone does not grant any land tenure or access, only the use of water from the approved diversion point. Additional authorization under either the Land Act, Petroleum and Natural Gas Act, or Section 24 of the Water Sustainability Act may be required.

Applicants must determine if additional authorizations are required to support operations under the use approval. (For example, access to the water withdrawal point(s)). If the proposed activity, as described in the short-term water use application, requires primary or associated oil and gas activities (roads, water storage sites, pipelines and facilities) and/or the use of Crown land, applicants must apply to the Commission for permits related to these requirements.

Applicants are encouraged to submit applications for all activities associated with a short-term water use application as a single multi-activity application in AMS.

**Additional Requirements for Engaging Rights Holders**

For the purposes of short-term water use applications, rights holders as defined in the Water Sustainability Act include: water licensees, applicants for water licences, use approval holders, short-term water use applicants, riparian owners, and owners whose property may be physically affected by the applicants’ operations. Applicants will notify and engage with rights holders as defined in the Water Sustainability Act and provide a summary of that engagement with their application, using the applicable line list as detailed in Chapter 6.2 of this manual.
Surface Agreement for Activities on Private Land

Access to private land is not granted along with use approvals. Activities associated with a use approval, and to be carried out on private land, such as space for pumps or access roads, require a surface agreement with the land owner. Surface agreements must be in place before applying to the Commission; however, the agreement is not required to be submitted with the application.

Authorizations for Temporary Water Lines or other Works under Section 24 of the Water Sustainability Act

Identify if any works, as defined in the Water Sustainability Act, are required for the water withdrawal. Where a temporary fresh water line is required, applicants should use existing rights-of-way and roads to the greatest extent possible. A Section 24 authorization may be issued for the following:

- A water line, where no cut is required.
- A water line on existing seismic lines, pipeline or road rights of way where no new cut is required.

Other Considerations for Temporary Water Lines:

- If a water line is located on Crown land where new cut is required, an associated oil and gas activity application is required. The Commission does not encourage additional cut for temporary water lines associated with short-term water use.

- If access to Crown land under Section 24 of the WSA is required, please provide Temporary Works Documents (mapping/sketches etc.) identifying the location of the proposed works. For example, if Crown land access under Section 24 is required to install a temporary above ground water line please provide a map of the proposed temporary above ground water line routing.
Withdrawal Volumes and the Commission Decision Framework

The Commission manages use approvals to protect fisheries or aquatic resources, and to protect the drinking water supply. There is considerable variability in the hydrology of water bodies across B.C., varying from east (drier) to west (wetter). There is also very strong seasonality of water supply, varying from high runoff rates during the spring snowmelt period (typically mid-April until late June), to low runoff rates during winter (typically mid-December until late March).

The volume of water requested through a use approval should be reasonable with respect to the associated activities. The short-term water use application should be consistent with the guidance detailed below on aspects of the decision-making framework used by the Commission to provide a basis for assessing environmental flows needs associated with use approvals under Section 15 of the Water Sustainability Act.

If oil and gas activities cannot adhere to these water withdrawal guidance recommendations, a rationale and justification must be included in the permit application, along with the additional operational practices or mitigations that will be employed to prevent any adverse effect on the water supply in that watershed. Field-based monitoring evidence must clearly show sufficient inflow to a lake or discharge in a stream to support the requested water withdrawals for the specified time. Applicants require a qualified person to collect, interpret and provide support.

Guidance on water withdrawals are as follows:

1) Winter Season Withdrawals in Northeast BC (December 15 – March 31)

   Watersheds with drainage areas less than 500 square kilometres are likely to have zero or near zero discharge during most winters, and will not support water withdrawals.

2) Watersheds with drainage areas of 500 square kilometres or greater, the following risk-based framework is used to guide winter water withdrawals:
   - Percentage of winter discharge (Jan-Mar) in relation to mean annual discharge determines sensitivity.
• Stream size is determined from mean annual discharge as in the table below. Small streams have mean annual discharge of less than 10 m³/s, and medium to large streams have mean annual discharge of 10 m³/s or greater.

• Quantitative values on Mean Annual Discharge (MAD) and Jan-Mar winter discharge is obtained for all watersheds in northern BC from the NorthEast Water Tool (NEWT), NorthWest Water Tool (NWWT) or the Omineca Water Tool (OWT).

• Small rivers and streams in northeast BC are subject to deep ice formation and very low flows during the winter period. In some cases, field evidence indicates there can be zero flow. The small quantities of liquid water remaining in small streams during winter can be critical to fish over-winter survival.

• Inflow to most lakes in northeast B.C. during the winter period is usually zero or near-zero, due to prolonged and sustained temperatures below freezing, frozen ground conditions, and the accumulation of precipitation as snow. The maximum cumulative volume of water (for all use approvals and water licences) approved for withdrawal from lakes during the winter flow period is restricted to a 10 cm maximum drawdown as a function of the lake area, regardless of the watershed area for the lake. Examples are shown in Table 4.I and 4.J.

• The commission will evaluate application for winter withdrawals outside of Northeast BC on a case by case basis, taking into account the characteristics of the watershed and the amount of water requested.

3) Water source dugouts: the water in water source dugouts is largely acquired through the percolation and flow of groundwater. Streams (including swamps, marshes and fens) proximal to water source dugouts (e.g. within 50 to 100 meters of any edge of a water source dugout) may have potential to be hydraulically connected to the dugout. As such, there is a requirement that short term use of water authorizations for water source dugouts consider the environmental flow needs of streams “reasonably likely” to be connected to the water source dugout. Where there are no environmental flow needs concerns relating to proximal streams with a water source dugout, there is no restriction on the water withdrawals. Where there are environmental flow needs concerns relating to proximal streams, the applicant must provide a mitigation strategy to address those concerns or verification that no hydraulic
connectivity exists as prepared by a Qualified Professional.

4) If oil and gas activities cannot adhere to the above, the application must include field-based monitoring evidence collected and interpreted by a qualified person which provides clear support showing sufficient inflow to a lake or discharge in a stream during the winter period to support the requested water withdrawals.

### Table 4.1

<table>
<thead>
<tr>
<th>Sensitivity</th>
<th>Average Jan-Mar Discharge</th>
<th>Stream Size</th>
<th>MAD m³/s</th>
<th>Max Cumulative Winter Withdrawal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>&gt;20% of MAD</td>
<td>Medium-Large</td>
<td>≥10</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Small</td>
<td>&lt;10</td>
<td>15%</td>
</tr>
<tr>
<td>Sensitive</td>
<td>10-20% of MAD</td>
<td>Medium-Large</td>
<td>&gt;10</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Small</td>
<td>&lt;10</td>
<td>10%</td>
</tr>
<tr>
<td>Very Sensitive</td>
<td>&lt;10% of MAD</td>
<td>Medium-Large</td>
<td>≥10</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Small</td>
<td>&lt;10</td>
<td>5%</td>
</tr>
</tbody>
</table>

### Table 4.J

<table>
<thead>
<tr>
<th>Lake</th>
<th>Lake Area (hectares)</th>
<th>Lake Area (m²)</th>
<th>Maximum Drawdown (m)</th>
<th>Maximum Cumulative Volume for Approval (m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake 1</td>
<td>4.3</td>
<td>43,000</td>
<td>0.10</td>
<td>4,300</td>
</tr>
<tr>
<td>Lake 2</td>
<td>27.5</td>
<td>275,000</td>
<td>0.10</td>
<td>27,500</td>
</tr>
<tr>
<td>Lake 3</td>
<td>11.6</td>
<td>116,000</td>
<td>0.10</td>
<td>11,600</td>
</tr>
<tr>
<td>Lake 4</td>
<td>125.0</td>
<td>1,250,000</td>
<td>0.10</td>
<td>125,000</td>
</tr>
</tbody>
</table>
5) Open-Water Season Withdrawals (April 1 – December 15)

- Rivers and streams: The maximum volume of water approved for withdrawal from rivers and streams during the open-water season is guided by the water availability as calculated by NEWT, NWWT or OWT.

- Lakes: the maximum volume of water approved for withdrawal from lakes during the open-water season is guided by the water availability as calculated by NEWT, NWWT or OWT, limited to the 10 cm maximum drawdown limit.

- Water source dugouts: there is no restriction on the water withdrawal from water source dugouts unless restrictions are required as a result of the environmental flow needs of hydraulically connected streams.

4.7.4 Short-term Water Use Specific Activity Requirements

This section outlines application requirements for short-term water use applications. Requirements are dependent on the characteristics of each short-term water use activity (i.e. each POD in the application) and are outlined in detail below. In most cases, the details are input into the short-term water use application tab, but may require the upload of additional attachments to support the details including:

- Lake/pond: supply/demand analysis.
- Stream/river: supply/demand analysis.
- Environmental flow assessment and mitigation.
- Mapping of hydraulically connected streams, lakes or wetlands.

Attachments must meet specific size and file formatting restrictions in order to be uploaded correctly, as defined in Section 5.8 of this manual.
4.7 | Completing Short Term Water Use Activity Details

**Diversion Map**

Diversion map illustrating in detail the location and extent of planned activities at an appropriate scale. The diversion map must be uploaded in the Maps and Plans tab of the Application Management System and clearly indicate:

- Map date.
- NTS and BCGS map sheet numbers indicated on a legend and on the maps.
- North arrow.
- Version number (for example, “Revision #1, Amendment #1”).
- Any planned works associated with the proposed short-term use of water.

**Water Supply / Demand Analysis**

Water supply / demand analysis is required if the application is for stream as defined under the Water Sustainability Act, and contains withdrawals from a point-of-diversion (POD) greater than 200 m³/day, or for greater than 10,000 m³/year. Where more than one POD is being applied for, the thresholds apply to each POD individually. A water supply/demand analysis is not required for water source dugouts applications, except where they may be hydraulically connected to a stream.

The water supply demand analysis must include details on the hydrology of the stream from which the applicant is applying to withdraw water. This information can be provided via copies of the NEWT report, NWWT report, OWT report or through hydrological data gathered by a qualified professional.

The applicant must provide details on their water demand and a rationale to support the volume of water requested. For example, if applying for water for well completion (which includes hydraulic fracturing), the applicant must specify the well pad(s) and well(s) anticipated to be completed, the volume of water required per well, the anticipated volume of flowback water and the volume of flowback water that is anticipated for reuse, etc.
The applicant must provide information on associated works or activities, such as water storage, water transportation methodology (pipeline, truck, etc.) and intake and pumping systems if applicable.

4.7.5 Additional Considerations for Short-term Water Use Activity

Post Approval Reporting

Companies holding use approvals are required to submit monthly water withdrawal data to the Commission on a quarterly basis. Water withdrawal data must be reported for each approved withdrawal location. Data must be submitted through eSubmission. Short-term water use volumes are no longer be accepted via email. For information on eSubmission please refer to the eSubmission Portal User Guide on BCOGC website.

Data submitted quarterly is comprised of the total volume withdrawn each month (cubic metres). If no volume was withdrawn for a reporting period, or a part of a reporting period, a volume submission is still required. In this case, the volume withdrawn is “0m³”. Reporting periods are listed in Table 4.K.

Table 4.K Submission Reporting Periods

<table>
<thead>
<tr>
<th>Reporting Period</th>
<th>Report by Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>January – March</td>
<td>April 25th</td>
</tr>
<tr>
<td>April – June</td>
<td>July 25th</td>
</tr>
<tr>
<td>July – September</td>
<td>October 25th</td>
</tr>
<tr>
<td>October – December</td>
<td>January 25th</td>
</tr>
</tbody>
</table>

The Commission deems a failure to report as non-compliance and may take action depending on the severity of the infraction.

If a use approval has been cancelled, the permit holder is only responsible for reporting on water withdrawals occurring up to the cancellation date.
Compliance and Enforcement Related to Water Authorizations

Special conservation officer status allows the Commission to enforce specific sections of the Water Sustainability Act. Enforcement can include:

- Warnings.
- Prosecution (violation tickets or court appearance).
- Restriction of issuance of renewals and cancellation of existing permits.

Section 94 of the Water Sustainability Act states when and why an approval may be cancelled or suspended by the regulator. Cancellation or suspension by the Commission can occur when an operator fails to:

- Make beneficial use of the water.
- Construct within the timeframe.
- Pay rental/fees.
- Comply with an approval condition.
- Comply with the Water Sustainability Act.
- And/or other reasons as defined in Section 94 of the Water Sustainability Act.

4.7.6 Short-term Water Use Activity Submission: Data Field Completion

Table 4.L below provides detailed instructions for each of the data fields requiring input (not auto populated) within the Application Management System.
Table 4.L: Application Instruction Table for the Short-term Water Use Tab

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short Term Water Use (POD) Overview</strong></td>
<td></td>
</tr>
<tr>
<td>File XREF Number</td>
<td>Provide the XREF number for the primary activity listed above.</td>
</tr>
<tr>
<td>If no File XREF Number available, please provide a rationale</td>
<td>If there is no primary activity cross-reference number available, provide a rationale that clearly indicates how the authorization being applied for is related to an oil and gas activity.</td>
</tr>
<tr>
<td>Proposed Start Date</td>
<td>Select the proposed start date for the project.</td>
</tr>
<tr>
<td>Proposed Completion Date</td>
<td>Select the proposed completion date for the project.</td>
</tr>
<tr>
<td>Activity Description</td>
<td>Indicate the primary purpose for which the withdrawn water will be used.</td>
</tr>
<tr>
<td>Has every point of diversion been verified to sustain water withdrawal?</td>
<td>A water supply/demand analysis is required for any short term water use application that contains a single point-of-diversion of 200 cubic meters per day or greater, or 10,000 cubic meters per year or greater. A Water supply/demand analysis is not required for water withdrawals from water source dugouts.</td>
</tr>
<tr>
<td>Upload Water Tool Analysis Report</td>
<td>A Water Tool Analysis Report is required for “each” POD identified. Please ensure uploaded files are named so the applicable POD is easily identifiable.</td>
</tr>
<tr>
<td>Has previous approval been issued for the water withdrawal?</td>
<td>Indicate if the POD / requested withdrawal was included in a previous short-term use of water approval.</td>
</tr>
<tr>
<td>Previous Short Term Water Use Number:</td>
<td>Enter the AD number of the previous Short Term Water Use approval.</td>
</tr>
<tr>
<td><strong>Lake/Pond Details</strong></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Name of water supply source or clear description.</td>
</tr>
<tr>
<td>Are temporary works required for distribution of fresh water on Crown land?</td>
<td>Indicate if a permit over Crown land (Water Sustainability Act Section 24) is required for temporary works associated with this application.</td>
</tr>
<tr>
<td>Upload Temporary Works Document</td>
<td>Provide a map illustrating the location and area required for temporary works on Crown land.</td>
</tr>
<tr>
<td>Purpose</td>
<td>Select the primary purpose for which the withdrawn water will be used.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Surface Area &lt;5ha Indicator</td>
<td>Indicate if the surface area of the water body is less than five hectares.</td>
</tr>
<tr>
<td>Average Depth (m)</td>
<td>Indicate the average depth of the water body.</td>
</tr>
<tr>
<td>Surface Area on All Lakes (ha)</td>
<td>Indicate the surface area of the water body.</td>
</tr>
<tr>
<td>Year One Volume (m$^3$)</td>
<td>Indicate the total volume requested for the first year.</td>
</tr>
<tr>
<td>Year Two Volume (m$^3$)</td>
<td>Indicate the total volume for the second year of operations.</td>
</tr>
<tr>
<td>Proposed Volume / Day (m$^3$)</td>
<td>Enter the proposed volume (m$^3$) of water withdrawal per day.</td>
</tr>
</tbody>
</table>

**Stream/River Details**

<table>
<thead>
<tr>
<th>Name</th>
<th>Name of water supply source or clear description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are temporary works required for distribution of fresh water on Crown land?</td>
<td>Indicate if a permit over Crown land (Water Sustainability Act Section 24) is required for temporary works associated with this application.</td>
</tr>
<tr>
<td>Upload Temporary Works Document</td>
<td>Provide a map illustrating the location and areas required for temporary works on Crown land.</td>
</tr>
<tr>
<td>Purpose</td>
<td>Select the primary purpose for which the withdrawn water will be used.</td>
</tr>
<tr>
<td>Date of Measurement</td>
<td>Select the date measurements were taken.</td>
</tr>
<tr>
<td>Year One Volume (m$^3$)</td>
<td>Indicate the total volume requested for the first year.</td>
</tr>
<tr>
<td>Year Two Volume (m$^3$)</td>
<td>Indicate the total volume for the second year of operations.</td>
</tr>
<tr>
<td>Proposed Volume Per Day (m$^3$)</td>
<td>Enter the proposed volume (m$^3$) of water withdrawal per day.</td>
</tr>
</tbody>
</table>

**Water Source Dugout Details**

<table>
<thead>
<tr>
<th>Name</th>
<th>Dugout Name.</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-Reference Land Tenure File Number</td>
<td>Enter the land tenure file number for the tenured dugout.</td>
</tr>
<tr>
<td>Are temporary works required for distribution of fresh water on Crown land?</td>
<td>Indicate if a permit over Crown land (Water Sustainability Act Section 24) is required for temporary works associated with this application.</td>
</tr>
</tbody>
</table>
## 4.7 Completing Short Term Water Use Activity Details

<table>
<thead>
<tr>
<th>Upload Temporary Works Document</th>
<th>Provide a map illustrating the location and areas required for temporary works on Crown land.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume of Water Source Dugout (\text{m}^3)</td>
<td>Indicate the dugout's total volume including freeboard, not the volume to be withdrawn.</td>
</tr>
<tr>
<td>Year One Volume (\text{m}^3)</td>
<td>Indicate the total volume requested for the first year.</td>
</tr>
<tr>
<td>Year Two Volume (\text{m}^3)</td>
<td>Indicate the total volume requested for the second year of operations.</td>
</tr>
</tbody>
</table>
4.8 Changes in and About a Stream

Applicants applying for an oil and gas activity causing changes in and about a stream as defined in the Water Sustainability Act must complete the changes in and about a stream application tab in the Application Management System (AMS). The changes in and about a stream tab is made up of two components: stream details and exemptions. This section includes an overview of changes in and about a stream activity permitting, guidance regarding changes in and about a stream planning and design, details related to changes in and about a stream specific application requirements and detailed instructions for completing the data fields within the changes in and about a stream activity tab.

Please Note:

This manual is written as a whole and available to industry in sections to allow permit holders to access activity chapters. It is prudent of the permit holder to review the manual in its entirety and be aware of the content in other sections of the manual.

4.8.1 Changes in and About a Stream Defined

Common changes in and about a stream activities include the construction, maintenance and removal of watercourse crossings and crossing structures. Other types of works that comprise changes in and about a stream include stream diversion, stream bank erosion protection and/or stabilization, debris removal and beaver dam management.
Changes in and about a stream (instream works) are defined in the Water Sustainability Act (WSA) as:

- Any modification to the nature of a stream including the land, vegetation, natural environment or flow of water within a stream.
- Any activity or construction within the stream channel that has or may have an impact on a stream.

The Commission considers any works within the high water mark of any stream as “changes in and about a stream.”

Doing any instream works without a written authorization is a violation of the WSA. This includes the construction of dugouts across streams, or the diversion of streams into dugouts, to enhance water capture and storage.

Instream works are authorized in one of two ways. For oil and gas activities (wells, pipelines, geophysical, facilities or roads) permitted under OGAA, instream works can be authorized by the oil and gas activity permit, and the provisions of OGAA and the EPMR apply. For instream works associated with related activities, including CER related approvals, instream works must be authorized in accordance with Section 11 of the WSA. There are some distinct differences between these application streams with respect to instream works.

Despite the differences in the definition of a “stream” between the WSA and EMPR, operational assessments and field surveys usually integrate the two criteria. As noted further in this document, all applications for changes in and about a stream must indicate the riparian classification of the stream per Section 22-24 of the EPMR, as this detail is required for the Commission’s review. This is further detailed in the Environmental Protection and Management Guideline (EPMG).

Instream Works for Oil and Gas Activities

The legal mechanism by which instream works associated with oil and gas activities is authorized is OGAA.

Section 39(5) of the Water Sustainability Regulation defines instream works authorized by a permit issued under the OGAA and in accordance with the EPMR and any applicable permit conditions as authorized changes; additional authorization under Section 11 of the WSA is not required for OGAA activities.
Thus, for instream works associated with oil and gas activity applications, the
definition and classification of streams as defined in the EPMR will be used to
evaluate and authorize works.

The EPMR defines a stream as a watercourse scoured by water or containing
observable deposits of mineral alluvium, a continuous channel bed greater than
100 metres in length, connected to a fish-bearing stream or lake or waterworks
(all as defined in the regulation).

Small ephemeral or intermittent streams that do not meet the EPMR definition
and classifications of a stream (S1-S6) are classified as “Non-Classified
Drainages (NCD)”. An NCD is an ephemeral or intermittent watercourse having a
continuous defined channel that is less than 100 metres in length and at some
points may spread over a level area without defined banks, before flowing again
as a defined channel.

**Please Note:**
A NCD is not a stream under the EPMR. Therefore, it is not required to be identified or
evaluated in new OGAA applications where changes in and about a stream are applied
for with an OGAA activity, or for amendment applications where the original permit
included an OGAA activity. However, if the existence of a NCD is suggested in the
TRIM data, the construction plan should show it as a NCD.

**Instream Works for Related Oil and Gas Activities**

The legal mechanism by which instream works associated with a related activity
are authorized is Section 11 of the WSA.

The requirement for authorizations for instream works under Section 11 of the
WSA pertains to streams as defined in that Act, which has a broader meaning
than in the EPMR. A “stream,” as defined in the WSA, includes any natural
watercourse or source of water supply, whether usually containing water or not,
and a lake, river, creek, spring, ravine, wetland, swamp or gulch”. Streams do not
have to contain water in all times of the year, and can be ephemeral or
intermittent.
The term “natural watercourse” is not defined in the WSA; however, common usage indicates that a natural watercourse is a natural channel where water flows over a bed between defined banks. The flow of water does not need to be constant, but the channel must be a permanent and distinct feature on the landscape. The watercourse may also, at some point, spread over a level area without defined banks, before flowing again as a defined channel.

Please Note:

A NCD is a stream under the WSA, therefore, it must be identified or evaluated in CER applications and/or related activity applications where changes in and about a stream have been included. Appropriate provincial authorizations and/or approvals must be acquired before commencing any works in and about a NCD.

Applying for Authorization to Carry Out Instream Works

Activities comprising of or including instream works, as defined above, require authorization in writing. Commission staff may need to make a determination during application or project review as to whether the works will be authorized under OGAA or the WSA. Guidance on operational assessment is as follows:

- Streams, as mapped in the provincial Freshwater Atlas coverage (TRIM maps, at 1:20,000 scale), are assumed to be streams under the WSA and OGAA, unless demonstrated otherwise.
- Activities crossing or intersecting a “mapped” stream, but where there is believed to be no stream, require the submission of field-based evidence collected by a qualified individual to demonstrate that there is no stream.
- Small streams, which can have subtle field expression, are difficult for field surveys done in the winter season, when snow covers the ground. It should not be assumed that because a stream cannot be seen under snow cover that a stream does not exist.
- Any streams meeting the S1-S6 classification of streams as defined in the EPMR are required to further identify the riparian management areas associated with the streams as part of the application deliverables.

There are instances where a stream exists in the field but is not depicted on the provincial map base. Authorization for any works in or about the stream is still required.
If a feature depicted as a stream on the Freshwater Atlas coverage is not evident during the field survey, the construction plan submitted in conjunction with the application should note “No Watercourse Evident” or “No Watercourse Visible” (or something similar) and instream works for that watercourse do not need to be included in the application itself (i.e. in the spatial data submitted with the application). The features must not be listed as NCD in the application.

Man-made ditches and ditch lines are generally not streams under the WSA, and applicable authorization may not be required for a person to do “works” associated with ditches. That said, where manmade structures have sufficiently naturalized, they may become streams to which the provisions of WSA or OGAA apply. Where there is a question of whether or not a watercourse or waterbody is a stream, please contact the appropriate Commission’s Authorizations Manager to discuss the specific situation and how works in or in proximity to that feature may be considered in an application.

In addition, in some cases, where ditches are being used as fish habitat (this can occur commonly on floodplain areas) the requirements of the federal Fisheries Act may apply.

### 4.8.2 Creating a Changes in and About a Stream Activity

It is recommended that instream works be applied together with the related OGAA or CER activity(s) application or as an amendment to the related OGAA or CER activity permit. If it is necessary to apply for instream works as a stand-alone (single) activity, applicants must provide rationale explaining why the related application determination(AD) number cannot be amended to include the changes in and about a stream activity. Single activity applications for instream works must provide a cross reference number to a primary oil and gas activity to which the application relates in accordance with Section 24(3) of OGAA.

Regardless of what regulatory provision the instream works will be authorized under, the location of any proposed works must be included in the spatial data and “Changes in and About a Stream” must be selected as an activity type in the application. For information on completing this tab in the AMS, refer to section 4.8.4, below.
Applications can include multiple stream impacts (e.g. multiple stream crossings for a road, pipeline or geophysical program).

**Changes in and About a Stream Authorization Amendments**

Permit holders must submit an amendment application to add, or modify any portion of an authorization for instream works. For any instream works authorized through an OGAA permit, any modifications to the authorization will require an amendment to the OGAA permit. An amendment can include requests for multiple changes to a single permit but multiple amendment applications cannot be submitted for the same permit at once.

**Term of Approval**

Changes in and About a Stream authorizations are only valid for the initial construction of the works, unless otherwise indicated in the permit or authorization. Specific permit provisions authorizing instream works for general maintenance and operations activities associated with OGAA road and pipeline permits authorize instream works for the life of the activity. Refer to the terms of the specific permit when considering whether additional authorization is required for instream works for maintenance or operations purposes.

**4.8.3 Changes in and About a Stream Planning & Design**

This section provides planning requirements, guidelines and considerations when planning an application for instream works. The Commission reviews the application relative to technical information provided in AMS; therefore, applicants should review this section for an indication of any application requirements or attachments required.

**Regulatory Requirements**

Changes in and about a stream must meet the applicable design and operational requirements outlined in the Oil and Gas Activities Act (OGAA), the Water
The Sustainability Act (WSA), the Water Sustainability Regulation (WSR), the Ground Water Protection Regulation (GWPR), the Dam Safety Regulation (DSR), and the Water District Regulation (WDR). The Commission does not grant exemptions under the WSA.

### Guidance Requirements

In addition to this Manual, applications for instream works should follow guidance provided in the EPMG for minimizing and/or avoiding impacts on the surrounding landscape. Additional guidance is available from the following:

- **Fish-stream Crossing Guidebook** (published by the Ministry of Forests, Lands and Natural Resource Operations, the Ministry of Environment, Fisheries and Oceans Canada) for more information on planning stream crossings on fish bearing streams.

- For many types of proposed works, relevant standards and best practices are found at the following Ministry of Environment link: Standards and Best Practices for Instream Works.

- The Canadian Association of Petroleum Producers provides guidance on pipeline-associated watercourse crossings: Pipeline-Associated Watercourse Crossings.

If the oil and gas activities cannot adhere to these guidance recommendations, a rationale must be included in the permit application. This rationale must include site specific information regarding the guidelines not followed, an explanation of why they cannot be followed, and the proposed plan and mitigation strategies the company will implement in lieu of the guidance recommendations not followed.

### Riparian Classification

All watercourses impacted by the application must be assigned a riparian classification as defined in Section 22, 23 and 24 of the EPMR. Guidelines and requirements for riparian classification of streams, wetlands, and lakes are provided in Chapter 5 of the Commission’s EPMG. The riparian classification must be entered in the Application Management System. Please see note above regarding non-classifiable streams (NCDs).
Crossing-type Selection

For watercourse crossings, the crossing method must be indicated in the application. Crossing methods include: aerial, bank erosion protection, bridge, ice bridge, clear span bridge, snow fill, culvert, major culvert, debris removal, gravel removal, punch and bore, (HDD) directional drill, micro tunneling, matting, stream diversion, temporary ford, flow isolation and open cut. Applications may include multiple stream impacts and/or crossings.

If a stream impact location requires multiple crossings methods, applicants are required to identify the primary crossing method, all other crossing method(s) required may be selected from the secondary crossing method list. If a mechanical stream crossing is required, the applicant must respond ‘Yes’ to the question, “Is a mechanical crossing required at this location?”. When ‘Yes’ is selected, applicants may select the applicable mechanical crossing method from the drop down list.

4.8.4 Changes in and About a Stream Activity Requirements

This section outlines application requirements for changes in and about a stream application. Requirements are dependent on the characteristics of instream works and are outlined in full details below. In most cases, the details are input into the changes in and about a stream application tab in AMS, but may require the upload of supporting attachments, including:

- Sketch plan (if applicable).
- Fisheries habitat assessment.
- Mitigation strategy.

Attachments must meet specific size and file formatting restrictions as defined in Chapter 7 of this manual.
Fish Habitat Assessment

Where instream operations are required on a fish bearing stream or where there may be an impact to fish and/or fish habitat, a fish habitat assessment is required to be submitted with the application. Applicants are responsible for determining fish presence or absence and assessing fish streams for fish habitat values prior to application for instream works.

Plans, Designs and Drawings Signed by a Qualified Professional

Some changes in and about a stream applications require the submission of designs, plans and drawings signed and sealed by a Professional Engineer (P.Eng) licensed or registered under the Engineers and Geoscientists Act, and/or a Qualified Professional (QP). Applications that require these deliverables include:

- Bank erosion protection – P.Eng.
- Bridge construction, maintenance or removal (other than clear span) – P.Eng.
- Major culvert construction, maintenance or removal – P.Eng (a Major Culvert is a pipe that has a diameter of 2,000 mm or greater, a pipe arch having a span of 2,130 mm or greater, an open bottom arch having a span of 2,130 mm or greater; or any stream culvert with a maximum design discharge of 6 cubic metres per second or greater.
- Stream diversion – QP.
- Large debris removal – QP.
- Gravel removal – QP.

For these purposes, a QP is someone who through suitable education, experience, accreditation and knowledge may be reasonably relied on to provide advice within their area of expertise. They will usually be a professional registered and in good standing with a British Columbia professional association:

- A Professional Engineer or Professional Geoscientist licensed or registered under the Engineers and Geoscientists Act.
- A Forest Technologist or Professional Forester registered with The Association of British Columbia Forest Professionals.
4.8 Completing Changes in and About a Stream Activity Details

- A Biology Technologist or Professional Biologist registered with The Association of Professional Biology.
- A Professional Agrologist registered with the British Columbia Institute of Agrologists.
- Has the education, knowledge, experience and expertise to classify streams under the WSA and EPMR, and to sign and seal plans and designs to make changes in and about a stream.

Works plan

For applications involving works other than watercourse crossings, a Works Plan must accompany the application. The Works Plan for projects involving gravel or debris removal, bank erosion protection, or stream diversion, must be completed by a qualified professional. Works Plans should include the following:

- A detailed description of the works proposed including a rationale for why the works are required.
- Site-specific stream and aquatic habitat information.
- A description of the operational activities that the company will utilize to avoid or mitigate impacts to the stream values.
- A project monitoring plan.
- Any other relevant information that may assist the decision maker in rendering a decision on the application. Photos are recommended.

4.8.5 Changes in and About a Stream Activity Submission: Data Field Completion

Table 4.M below provides detailed instructions for each data field requiring input within the AMS.
### Table 4-M: Application Instruction Table for the Changes in and About a Stream Tab

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed Start Date</td>
<td>Select the proposed start date for the project.</td>
</tr>
<tr>
<td>Proposed Completion Date</td>
<td>Select the proposed completion date for the project.</td>
</tr>
<tr>
<td>Activity Description</td>
<td>Provide a description of the proposed works. If applying for a single activity application, provide a rationale as to why the related application determination (AD) number cannot be amended to include the Changes in and About a Stream activity.</td>
</tr>
<tr>
<td>Sketch Plan Attached</td>
<td>Indicate yes, if attaching a sketch plan that illustrates in detail the location and extent of the planned activities.</td>
</tr>
<tr>
<td>Upload Fisheries Habitat Assessment Indicator</td>
<td>Attach a Fisheries Habitat Assessment for works in and about a stream on all fish streams as defined in the EPMR.</td>
</tr>
</tbody>
</table>

**Stream Impact Specification**

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>File XREF Number (where it is displayed)</td>
<td>Select the XREF number to which the application relates.</td>
</tr>
<tr>
<td>No File XREF Rationale (where it is displayed)</td>
<td>Provide a rationale indicating why an application is being made for changes in and about a stream where no file cross reference number is available.</td>
</tr>
<tr>
<td>Stream/Watercourse Name</td>
<td>Enter the name of the proposed crossing.</td>
</tr>
<tr>
<td>Duration</td>
<td>Select the duration the crossing will impact the stream.</td>
</tr>
<tr>
<td>Riparian Class</td>
<td>Select the riparian classification of the watercourse to be crossed. If the impacted watercourse is a fish stream, a Fish Habitat Assessment must be attached as an application deliverable to the application package.</td>
</tr>
<tr>
<td>Bank Full Stream Width (m)</td>
<td>Enter the bank full width (metres) of the stream at the location of the proposed works.</td>
</tr>
<tr>
<td>Stream Gradient (%)</td>
<td>Enter the gradient of the stream (percent) at the location of the proposed works.</td>
</tr>
<tr>
<td>Primary Crossing Method</td>
<td>Select the primary crossing method.</td>
</tr>
</tbody>
</table>
### Label | Instructions
--- | ---
Secondary Crossing Method | If applicable, select all secondary crossing method(s) that apply.
Crossing Method Rationale | Provide a rationale explaining the circumstances in which all crossing methods would be employed.
Mechanical Crossing | Select the crossing type applicable to the mechanical crossing.

### Exemptions

<table>
<thead>
<tr>
<th>Do Stream Crossings Meet Best Management Practice:</th>
<th>Indicate yes, if the activity has been planned and will be undertaken in accordance with the Environmental Protection Management Regulation (EPMR) and in accordance with the Water Sustainability Act.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stream Crossings Meet Best Management Practice Rationale</td>
<td>If crossing method will not be undertaken in accordance with the EPMR and in accordance with the Water Sustainability Act, provide rationale and a mitigation strategy for the alternate proposed crossing method.</td>
</tr>
</tbody>
</table>
5. Completing Application Information Details

Application information supports the activity application and may be required depending on the type and location of the oil and gas and associated activity. This chapter provides detailed instructions of the Commission’s requirements for completing information details related to all of the activities included in an application in the AMS.

Each section of this chapter provides an overview of application information section, definitions and requirements to support the activity listed below. Application information detail requirements (and corresponding section number) in this chapter includes:

- 5.1 Administration
- 5.2 Oil and gas land use
- 5.3 Agriculture
- 5.4 Forestry
- 5.5 Archaeology
- 5.6 Environmental stewardship
- 5.7 Maps and plans
- 5.8 Attachments

Consultation and engagement with land owners, rights holders and First Nations are also application information tabs but due to the specifics and importance of the pre-planning requirements, they are detailed in Chapter 6 of this manual.

Application Information specific tabs are visible once a new (or amendment) application is created. Data fields are turned on or off based on the activity chosen and the technical and engineering provided in the activity detail section of the Application Management System. The validation functionality assists in ensuring all components of the application are completed. The requirements for the activity tabs are detailed in Chapter 4 of this manual. The Application Management System is designed to pull geographic location and coordinates from the spatial data uploaded during the application creation stage which triggers activity and land information. A globe symbol references pre-populated spatial data linked directly to the spatial files uploaded.
5.1 Application Management System Administration Tab

Information relating to the company representatives (and consultants) involved in application development is captured on the administrative tab. Anyone submitting information on behalf of an applicant must be registered in the Commission’s corporate registry in order to be selected in AMS. For more information on this registration process, see Chapter 2 of this manual.

Once selected as part of the application, the representative receives a notification email identifying them as a representative and contributing information to a permit application at the Commission. If the applicant company provides the representative with application rights within the Commission’s corporate registry, the representative is able to view applications for which they have been included as a representative, and contribute application data or information.

Specific representatives, such as an Engineer or Archaeologist; who provide information under their professional reliance and have been identified within the application as a representative or consultant, will receive an e-mail notification and an attached report relevant to the information provided upon submission of an application to the Commission.

The provision of an archaeology contact is mandatory if the application contains an archaeological component and an engineering contact is mandatory if the application contains an engineering component.

Please Note:

This manual is written as a whole and available to industry in sections to allow permit holders to access activity chapters. It is prudent of the permit holder to review the manual in its entirety and be aware of the content in other sections of the manual.
5.1.1 Administration Tab: Data Field Completion

The administration tab data input fields consist of a series of drop down menus to enter representative information. Table 5-A below provides detailed instructions for each of the data fields requiring input (not auto populated) within the Application Management System.

Table 5-A: Application Instruction Table for the Administration Tab

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who are the representatives for this project?</td>
<td>Enter the name or first three letters of the representative and select from the drop down list. If the company/contact conducting the oil and gas activity is not displayed please refer to the Company Administration section of the Oil and Gas Activity Application Manual.</td>
</tr>
<tr>
<td>Type</td>
<td>Select the representative type from the drop down list.</td>
</tr>
<tr>
<td>File Reference Number</td>
<td>Proponent's file number for the permit application.</td>
</tr>
<tr>
<td>HCA Permit Holder</td>
<td>Indicate the name of the person who holds the Heritage Conservation Act Section 14 (Archaeology) permit over the application area.</td>
</tr>
<tr>
<td>HCA Permit Number</td>
<td>Indicate the Heritage Conservation Act Section 14 permit number covering the application area.</td>
</tr>
</tbody>
</table>
5.2 Oil and Gas Land Use Information Tab

The Application Management System includes an application-level land tab to capture land information for an entire application (including land for all activities in the application). In addition, each activity has an associated land tab, to capture land information specific to each activity. Applicants must complete the land tabs to provide land use information. The Commission uses this information to support various reviews carried out on an application, and to support tenuring of Crown land area.

Please Note:
This manual is written as a whole and provided to industry in sections to allow permit holders to access activity chapters. It is prudent of the permit holder to review the manual in its entirety and be aware of the content in other sections of the manual.

5.2.1 Land Tab Considerations

Activity Area Overlapping Ministry of Transportation and Infrastructure Right-of-way

The Commission issues cutting permits for any new Crown land disturbance within Ministry of Transportation and Infrastructure (MOTI) unconstructed road allowances. Both unconstructed and constructed road allowances must be clearly marked in the body of the construction plan and included as a separate area item in the construction plan area table. The Commission will not issue land tenure over MOTI right-of-way. The area within the road allowance must be reflected in spatial data submitted for the application as per the spatial submission standards.
Please Note:

If the proposed road enters or affects a MOTI right-of-way, consent to carry out the approved activities must be obtained from MOTI before the project begins.

Please Note:

The submission of an MOTI polygon in AMS is mandatory when an applicant requires new cut within the MOTI right-of-way. If the application does not require new cut within an MOTI right-of-way, it is not mandatory to include the MOTI polygon.
5.3 Agriculture Land Reserve Information Tab

Submission of an application for an oil and gas or associated activity within identified agricultural reserve lands must include additional application deliverables specific to agricultural land. The required ALR deliverables vary based on the planned activity.

The agricultural land reserve tab requires specific application information details. This section includes an overview of the agricultural land reserve, guidance regarding agricultural land reserve planning and design, details related to agricultural land reserve specific application requirements and detailed instructions for completing the data fields within the agricultural land reserve tab.

Please Note:

This manual is written as a whole and provided to industry in sections to allow permit holders to access activity chapters. It is prudent of the permit holder to review the manual in its entirety and be aware of the content in other sections of the manual.

Please Note:

The Oil and Gas Activities Act defines both oil and gas activity and related activities. The Commission uses the term “associated oil and gas activities” in Section 4.6 of this manual to refer to some related activities associated with primary oil and gas activities. The ALC-OGC Delegation Agreement and other guidance documents use the term “ancillary activities” to define other or associated activities.
5.3.1 Agricultural Land Use Defined

The Agricultural Land Reserve (ALR) is a provincial zone in which agriculture is recognized as the priority use. ALR is a designation of land under the Agricultural Land Commission Act (ALC Act). The purpose of the ALR is to preserve agricultural land; its boundaries are based on the agricultural capability of the soil, not on the current use or ownership of the land.

**ALC-OGC Delegation Agreement**

The Agricultural Land Commission (ALC) is the B.C. provincial agency responsible for the administration of the ALR. The ALC and the Commission have signed a delegation agreement designed to further the one window regulatory approach for the oil and gas sector in British Columbia.

The ALC-OGC Delegation Agreement (Delegation Agreement) delegates limited authorities to the Commission under the Agricultural Land Commission Act (ALC Act) to authorize non-farm use of agricultural lands for oil and gas activities within the Northern Rockies and Peace River Regional Districts. The Delegation Agreement also exempts some oil and gas activities and ancillary activities from the requirement of an application for permission for non-farm use of ALR lands, where the prescribed criteria are met.

Before beginning the application submission in the Application Management System, determine if the proposed development is exempt from ALC application for non-farm use under the Delegation Agreement.
Please Note:

The Delegation Agreement does not apply to proposed developments related to pipeline projects regulated by the Canadian Energy Regulator; therefore, no ALR Schedule A report or Appendix II Rationale Statement is required for these types of activities.

The Delegation Agreement applies only within Northeast BC. Applicants submitting applications outside of Northeast BC that impact ALR lands must acquire ALC approval prior to the Commission adjudicating on the associated oil and gas or related activity application.

Determining Exemption from ALC Act Application Requirements

Appendix I of the Delegation Agreement describes categories of oil and gas activities and ancillary activities requiring applications under the ALC Act, or exempt from this requirement. Applicants should use this table in determining if a proposed development is exempt from requirements related to an application under the ALC Act. For reference, proposed developments exempt from application under the ALC Act for non-farm use, and those requirements related to an application under the ALC Act, are listed below (numbering corresponds to Appendix I of Delegation Agreement).

1) Oil and gas activity and ancillary activity sites (other than items 4 and 6) for which, on a section basis or equivalent, the combined total area occupied by existing and proposed activities is ≤ 20.0 hectares.

3) Pipelines.

5) Conversion of an existing oil and gas activity site to an oil and gas activity or ancillary activity site that is listed in (i) – (v) below, for which no new land is required.

   i. Facilities (including gas processing plants) that handle product from more than one facility or well site.

   ii. Camps.

   iii. Sumps.

   iv. Borrow/aggregate extraction sites.

   v. Produced-water / fresh water storage sites.
Please Note:

Non-farm uses that are exempt from the requirements of an application under the ALC Act for permission for non-farm use are subject to the conditions for reporting and reclamation set out in Section 4.3 of the Delegation Agreement. The applicant is still required to submit a Schedule A report and include an Appendix II Rationale in the ALR tab.

Requiring application under the ALC Act for non-farm use permission made to the Commission:

2) Oil and gas activity and ancillary activity sites (other than items 3 and 5) for which, on a section basis or equivalent, the combined total area occupied by existing and proposed activities is > 20.0 hectares.

4) Electric power line that is not immediately adjacent to access roads.

6) Conversion or expansion of an existing oil and gas activity or ancillary activity, or a new oil and gas activity or ancillary activity that is listed in 5 (i) – (v) above, for which new land is required and the total project (lease) area is >3.0 hectares.

Applications under ALC Act for Non-Farm Use

Appendix I of the Delegation Agreement states:

If the proposed activity requires an application under the ALC Act, the applicant is required to attach further deliverables to the agriculture tab (no separate application is necessary). These include referrals and responses from pertinent local governments (Peace River Regional District and/or Northern Rockies Regional Municipality), and the Ministry of Agriculture, in addition to a Schedule A Report and Appendix II Rationale. Upon receipt of the application and prior to making a decision under the ALC Act, the Commission considers input from local governments and the Ministry of Agriculture referrals and also the Schedule A and Appendix II Rationale. This review is carried out concurrently with the review of the entire application.
To determine the category of oil and gas activities or ancillary activities using Appendix I, applicants may need to complete area calculations to determine, on a section basis or equivalent, the combined total area occupied by existing and proposed oil and gas activities.

Refer to page 11 of the Delegation Agreement for more information regarding area calculations.

All existing and proposed oil and gas activities and associated activities should be included in calculations of combined total area, except:

- Pipelines (if underground), including temporary workspace required for construction purposes reclaimed at the same time as the pipeline right-of-way.
- Single riser site that is directly related to the operation of a pipeline and is less than or equal to 0.1 ha.
- Electric power lines with single-pole structures.
- Seismic lines (including cut lines made by hand or machine in the course of geophysical exploration) and temporary use sites for geophysical exploration (including camps) where the seismic lines and sites are immediately reclaimed following the completion of the geophysical exploration, if such reclamation is required by permit or by OGAA.
- Temporary winter access that is constructed in frozen conditions where no roadbed development is required, and
- Temporary use sites for ancillary activities (for example, log decking sites, workspaces, campsites, geotechnical investigation areas, storage sites, etc.) where:
  1. The site is only used during the construction phase of an oil and gas activity, and will be immediately reclaimed following the completion of the construction phase of the oil and gas activity.
  2. No surface soil stripping or significant compaction or rutting (as compared to adjacent site) is reasonably expected to occur, and if such things do occur, the disturbed area is immediately reclaimed; and
3. The site is available for farm use after the construction phase of the oil and gas activity has been completed.

5.3.2 Agriculture Requirements for Various Application Types

**New OGAA Applications**

Required ALR application deliverables, including additional deliverables for an ALC Act Application for Non-Farm Use (where required), must be submitted on the agriculture tab in the Application Management System. Where OGAA activity applications include AOGA sites, ALR deliverables must include consideration of these areas.

**New Applications for Associated Oil and Gas Activities on Crown Land**

For AOGA applications, related to OGAA activity; but submitted as a single activity application, required ALR application deliverables, including additional deliverables for an ALC Act Application for Non-Farm Use (where required), must be submitted on the agriculture tab.

**ALR Assessment for Associated Oil and Gas Activity Sites on Private Land**

Where a proponent plans to use private land within the ALR for the purpose of an AOGA and an application is being made separately from an OGAA application, an Agriculture Assessment application ('ALR Assessment' application type) is created in the Application Management System. When submitting this application, required deliverables are limited to administrative, spatial and agriculture related details. ALR application deliverables are similar to those for new OGAA applications. The use of the agriculture assessment application type is considered an exception. The recommended standard process is to include AOGA on private land with an OGAA activity application.
5.3 | Agriculture Land Reserve Tab

Please Note:

For AOGA sites on private land, the Commission does not grant permission to carry out the activities (e.g. construct a borrow pit), but may grant permission for non-farm use of ALR land or acknowledge that the AOGA is exempt from an ALC Act Application for Non-Farm Use.

Amendments

When submitting an amendment application associated with an OGAA permit, associated oil and gas activity, applicants must submit amended ALR application deliverables, including amendments to ALC Act authorizations (where applicable).

5.3.3 Agricultural Land Reserve Information Requirements

This section outlines requirements for agricultural land reserve information. Requirements are dependent on the characteristics of each application and are outlined in full details below including a description, details of additional information and requirements. In most cases, the details are input into the agricultural land reserve tab, but may require the upload of an attachment to support the details including:

- Appendix II rationale statement.
- Schedule A report.
- Referrals from Ministry of Agriculture and local government.

Attachments must meet specific size and file formatting restrictions in order to be uploaded correctly as defined in Section 5.8 of this manual.

Appendix II Rationale Statement

When planning oil and gas activities on ALR lands, applicants are expected to minimize disturbance to ALR land and agricultural operations by limiting the extent of disturbance to what is necessary to safely and appropriately conduct the activity. Appendix II of the Delegation Agreement provides a hierarchy of land
types where oil and gas activities should be located to minimize impact on agricultural operations. Ultimately, minimizing impact on agricultural operations is achieved by determining the optimal combination of total area disturbed and location of the activity in relation to current and planned agricultural operations and agricultural capability of the land.

In making an application to the Commission for permission to carry out an oil and gas activity on ALR land, applicants must submit an Appendix II Rationale statement. This statement should clearly identify how the design and location of the proposed oil and gas activity addresses the guidelines set out in Appendix II of the Delegation Agreement.

Please Note:

The Appendix II Rationale textbox in the ALR tab is character limited. It may be necessary to upload the rationale as an attachment in order to clearly demonstrate how the guidelines set out in Appendix II of the Delegation Agreement have been met.

Schedule A Report

Schedule A Reports are required for all activities located on ALR lands, with the exceptions listed in Schedule A of the Delegation Agreement. A Schedule A Report is intended to outline and record the predevelopment assessments and conservation planning carried out by the project proponent with respect to ALR lands. These reports must be signed by both a qualified specialist and the applicant, and are intended to include the following information:

- Area assessment: to link with Appendix II guidelines and document current land resource and agricultural use in the area of the application to aid in planning the activity location in a manner that minimizes agricultural impacts.
- Predevelopment site assessment: to document baseline site information for soil management and reclamation planning.
- Recommendations for soil conservation: based on an analysis of planned developments using the baseline site assessment.
- Reclamation planning.
For most applications, all items listed above are required. However, if the proposed oil and gas activity and/or ancillary activity is located entirely on an existing site, a subset of this information may be required. Schedule A of the Delegation Agreement provides detailed instructions to use in preparing a Schedule A report and report requirements.

**Area Assessment**

An area assessment aids in planning the location of oil and gas activities to minimize the impact on agricultural lands by associating the activity planning guidelines set out in Appendix II of the Delegation Agreement and documenting current land resource and agricultural use in the area. The area assessment consists of a 1:20,000 scale or larger recent air photo or satellite imagery base showing the surface land use and on which the following features are plotted:

- Agricultural capability units.
- Agricultural use, residences, and farm buildings.
- Existing oil and gas activities and ancillary activities.
- Linear features, including roads and pipelines.
- Quarter section boundary lines, land ownership information and farm units.
- Surface water features and other significant terrain features that may limit development.
- Location of the proposed activities.

For more information regarding area assessments, refer to the Delegation Agreement. An example area assessment is shown in Figures 5-A and 5-B.

**Please Note:**

For applications on private land where the land owner will not grant surface access for the purposes associated with the preparation of a Schedule A Report, the minimum application deliverables are an area assessment and an Appendix II Rationale. The Commission will consider this material when making a statutory decision on the proposed activity, and will require the applicant to submit a completed Schedule A after gaining surface access to the land. In these cases, disturbance to the land will not be allowed until after the Commission has reviewed the completed Schedule A Report.
Figure 5-A: Area Assessment Example
Site Assessment

A site assessment documents the site information for soil management and reclamation planning and at a minimum must include:

- Site information.
- Site description.
- A description of sampling procedures used to carry out the soil assessment.
- Soil assessment.
- Invasive plants information (if the site assessment is conducted during the growing season).
- Maps.

For a more detailed description of information required in a site assessment and required sampling procedures, refer to pages 16-20 of the Delegation Agreement.
Recommendations for Soil Conservation

Where appropriate, the site assessment should include any site specific measures for the construction and production phases that are recommended to achieve effective and efficient restoration as required under the Schedule B of the Delegation Agreement, including measures relating to:

- Topsoil stripping depths and storage.
- Preventing or controlling erosion and compaction.
- Surface water management.

Reclamation Plan

The reclamation plan provides a brief description of how the site will be restored once it is no longer required for the oil and gas activity. The reclamation plan must include:

- Post oil and gas activity land-use objective.
- Soil handling.
- Re-vegetation.

Specific reclamation criteria for lands within the ALR are found in the site reclamation requirements as part of the Schedule B section in the Delegation Agreement.

In cases where developments are planned on private land, a Schedule A report must be filed with the surface land owner and with the Commission.

Referrals to Ministry of Agriculture and Relevant Local Government

In preparation of an application that is not exempt from an application under the ALC Act, applicants are required to engage and gather comments from the B.C. Ministry of Agriculture and the relevant local government (Northern Rockies Regional Municipality or Peace River Regional District, depending on the location of the proposed non-farm use).
To carry out this engagement, applicants must provide the Ministry of Agriculture and the relevant local government with a referral package and cover letter. Applicants must then allow 21 days for response prior to submitting their application to the Commission. Copies of any responses received by the applicant, and copies of the referral cover letter, must be attached to the application submitted to the Commission on the agriculture tab. Applicants may submit their application to the Commission prior to the elapse of 21 days referral timeline, with written approval from an Authorization Manager, providing that the full referral package will be submitted after the 21-day referral period.

Contents of the referral package must include:

- Referral package cover letter.
- Copy of the ALC application printout of the ALR Assessment Details tab in AMS.
- Schedule A report and Appendix II rationale.

Referral cover letters must include:

- Applicant company name and contact info.
- Statement that the referral is being sent to satisfy the requirements of the Delegation Agreement.
- A short description of the proposed project.
- Statement describing why an ALC application to the Commission is required.
- A statement indicating a 21 day response period.
- Instructions on how to submit a response or request further information.
- Statement indicating that responses may be submitted to the applicant of the proposed activity or directly to the Commission. Responses to the Commission are emailed to ALR.Referrals@bcogc.ca.

If a concerned response from the Ministry of Agriculture or relevant local government is received during the 21 day response period, applicants are encouraged to further engage the responding party and attempt to resolve issues or concerns raised. The Commission may further engage these parties during application review.
### 5.3.4 Agricultural Land Reserve: Data Field Completion

Table 5-C below provides detailed instructions for each of the data fields requiring input (not auto populated) within the Application Management System.

#### Table 5-C: Application Instruction Table for the Agricultural Land Reserve Tab

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix II Rationale</td>
<td>Provide a statement that clearly identifies how the design and location of the proposed oil and gas activity addresses the guidelines set out in Appendix II of the Delegation Agreement.</td>
</tr>
<tr>
<td>Schedule A Required</td>
<td>Indicate yes, and upload if a Schedule A report is required.</td>
</tr>
<tr>
<td></td>
<td>The Schedule A report must include: an area assessment, a predeveloped site assessment, recommendations for soil conservation and a preliminary reclamation plan.</td>
</tr>
<tr>
<td>Is the application exempt from the ALC Application for Non-Farm Use?</td>
<td>Indicate Yes if this application is exempt from submitting an ALC Application for Non-Farm Use as per Appendix I of the ALC-OGC Delegation Agreement.</td>
</tr>
<tr>
<td>Local Government Referral Indicator</td>
<td>Indicate yes, if a referral from the local government has been received.</td>
</tr>
<tr>
<td>Local Government Referral Date Received</td>
<td>Select the date the referral was sent to the local government.</td>
</tr>
<tr>
<td>Ministry of Agriculture Referral received</td>
<td>Indicate yes, if you have received a Ministry of Agriculture referral.</td>
</tr>
<tr>
<td>Ministry of Agriculture Referral Date</td>
<td>Provide the date the referral was sent to the Ministry of Agriculture.</td>
</tr>
<tr>
<td>Has surface land owner consent been received?</td>
<td>Indicate Yes if the consent of the registered surface land owner(s) has been received by the proponent.</td>
</tr>
<tr>
<td>Label</td>
<td>Instructions</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Has the Schedule A Report been provided to the surface landowner?</td>
<td>Indicate yes, if the Schedule A Report has been provided to the surface land owner.</td>
</tr>
</tbody>
</table>
Chapter 5.4

5.4 Forestry Information Tab

Submission of an application for an oil and gas or associated activity must include additional application deliverables specific to forestry. The required forestry deliverables vary based on the planned activity.

The forestry tab requires specific application information details. This section includes an overview of forestry information, guidance and details related to forestry specific application requirements and detailed instructions for completing the data fields within the forestry tab.

**Please Note:**

This manual is written as a whole and provided to industry in sections to allow permit holders to access activity chapters. It is prudent of the permit holder to review the manual in its entirety and be aware of the content in other sections of the manual.

5.4.1 Forestry Information Defined

The Commission issues cutting permits to facilitate the cutting of timber required as part of the construction of proposed oil and gas or associated activities. Cutting permits are issued under a Master Licence to Cut (MLTC), and stumpage is payable according to the applicable (interior or coast) appraisal manual.
5.4.2 Forestry Information Requirements for Various Application Types

The Application Management System requires input of information to inform a decision to issue a cutting permit for applications where new cut is required.

Cutting permits for most primary oil and gas or associated activities are issued along with the permission or authorization to carry out the primary or associated activity. However, the Commission does not issue cutting permits for activities on:

- Woodlot areas.
- Timber reserves on private land.

In these areas, cutting permits must be issued by the Ministry of Forests, Lands and Natural Resource Operations through the woodlot tenure holder or land owner. When preparing applications for submission to the Commission in these areas, applicants should not include these areas in new cut area calculations.

Amendments

When submitting an amendment application associated with an existing approval, submit amended forestry details where applicable.

Forest Act – Cutting Permit

The Forest Act – Cutting Permit application can be used in scenarios where a new cutting permit or changes to an existing cutting permit (with no modifications to the existing permissioned area) is required. Some additional scenarios where only changes to the Forestry authorization may be needed include: amalgamations; transfers; expired cutting permit(s); expired Master Licence(s) to Cut and where new cut is required only over MoTI areas.

Reduction to permitted area of cut does not require an application as this will be addressed through the post construction process.
Stumpage

The Ministry of Forests, Lands and Natural Resource Operations posts appraisal manuals for the interior and coast outlining the process for determining stumpage payable on cutting permits issued for oil and gas development.

In the Fort Nelson, Mackenzie, Peace and Rocky Mountain districts, stumpage for timber cleared for most oil and gas purposes is calculated on a per-area basis. For these permits, as-cleared information reported by the permit holder on the post-construction plan or geophysical final plan submission is forwarded to the Ministry of Forests, Lands and Natural Resource Operations. As-cleared area is multiplied by the reserve stumpage rate for the district to determine stumpage payable.

For cutting permits outside of the districts noted above, or for pipeline right-of-ways over 2,000m³ of timber volume, stumpage is calculated on a per-volume basis.

Refer to the Ministry's Timber Pricing page for more information and guidance.

Stumpage Waste Assessment

Operators cutting Crown timber are required, regardless of utilization, to report and pay the province for the timber. According to the specifications detailed in the Master Licence to Cut, exempted merchantable fibre, outside the Forest Districts described in Section 6.6 of the Interior Forest Appraisal Manual, must have a waste survey completed and ensure stumpage is billed accordingly.

5.4.3 Forestry: Additional Considerations

Forest Health

Fibre waste left onsite must be managed to minimize fire and pest risks and must be disposed of at the end of the clearing phase or at the end of the summer fire season, whichever comes first.
Post Construction Information

As a condition of the MLTC, permit holders submit as-cleared information within 60 days of clearing. As-cleared information is submitted to the Commission as part of the post-construction plan submission requirement. The Commission forwards as-cleared information to the Ministry of Forests, Lands and Natural Resource Operations for stumpage billing.

5.4.4 Forestry: Data Field Completion

Table 5-D below provides detailed instructions for each of the data fields requiring input (not auto populated) within the Application Management System.

Table 5-D: Application Instruction Table for the Forestry Tab

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Cut Required</td>
<td>Select yes, if new cut will be required for this application.</td>
</tr>
<tr>
<td>Area of Proposed Cut Over Crown Land and MoTI</td>
<td>Enter the total proposed area of new cut disturbance on Crown land for the corresponding forest district (including unconstructed area within MoTI road allowances; excluding woodlot areas).</td>
</tr>
<tr>
<td>Additional Area of Proposed Cut Over Crown Land and MoTI</td>
<td>Provide the additional area of new cut required over Crown land and MoTI. This does not include permitted area of cut or area of cut reported to date.</td>
</tr>
<tr>
<td>Upload Spatial Data</td>
<td>Spatial upload should only include area with MoTI right-of-way.</td>
</tr>
<tr>
<td>Merchantable Deciduous Timber Volume on Crown Land (m³)</td>
<td>Enter the volume of deciduous timber on Crown land impacted by the application area (less volume within woodlot area).</td>
</tr>
<tr>
<td>Merchantable Coniferous Timber Volume on Crown Land (m³)</td>
<td>Enter the volume of coniferous timber on Crown land impacted by the application area (less volume within woodlot area).</td>
</tr>
</tbody>
</table>
5.5 Archaeology Information Tab

Submission into the Commission’s Application Management System (AMS) for an oil and gas or associated activity must include application deliverables specific to archaeology as discussed in this section. The required archaeology deliverables vary based on the planned activity. The information entered into the archaeology tab of AMS is to be entered by, or obtained from a permitted professional archaeologist.

Please Note:

This manual is written as a whole and provided to industry in sections to allow permit holders to access activity chapters. It is prudent of the permit holder to review the manual in its entirety and be aware of the content in other sections of the manual.

5.5.1 Professional Reliance and Results Based Archaeology Review

The professional reliance and results based review process at the Commission was established in 2004 and is designed to support the following objectives:

- Increase the efficiency and effectiveness of the review process.
- Ensure compliance with applicable legislations (Oil and Gas Activities Act (OGAA) and Heritage Conservation Act (HCA)).
- Support clients in the fulfilment of their permit obligations.
- Manage archaeology resources by balancing and considering all land values.
Guide, evaluate and provide recommendations to improve the effectiveness of client’s management systems as they apply to archaeological resources through the Archaeology Audit Program (AAP).

The Commission’s archaeology unit has three main streams of business:

- Application screening and review of archaeology components.
- Business conducted on behalf of the Archaeology Branch of FLNRORD.
- Archaeology Audit Program.

**Figure 5-D Preparation and Submission of Archaeology Requirements**
Important Preparation and Submission Factors

1. If the archaeology tab is generated a permitted archaeologist must be listed on the administrative tab. A professional reliance email notification will be sent to the archaeologist listed on the administrative tab upon submission of the application. If the archaeology tab is generated and no archaeologist is listed on the administrative tab the application will be moved into revision to allow for the addition of the archaeologist to the administrative tab.

2. A permitted archaeologist must review each application area to evaluate the potential for impacts to archaeological values and identify what, if any, additional work may be required. The Commission expects applicants to:
   - Engage a reputable archaeology company employing professionals eligible to hold a permit to work in the application area under Section 14 of the Heritage Conservation Act and specific to the application area.

3. The permitted archaeologist completes the Archaeology Information Form (AIF) designed for AMS and the appropriate data fields within the archaeology tab. An AIF designed for AMS can be found on the Commission’s website and should be used for all applications when new disturbances are anticipated within an application area. Only applications submitted as an “Administrative Change” do not require an AIF. Administrative Change is defined below, under “Other reference terms”.

Ideally, the information on the AIF will be entered into AMS by the applicant’s permitted archaeologist and the form submitted to the applicant for confirmation of project information and upload. In instances where the applicant has not granted permissions for their archaeologist to access AMS, either the applicant or their agent will complete the archaeology tab.

Either the oil and gas applicant, their agent or their archaeologist must upload the completed and signed AIF into AMS. The uploaded document should be placed under “Other Archaeology Document.”
Please Note:
The AIF is an auditable document and must include the appropriate HCA Section 14 permit number and the permit holder's signature.

4. The submitted information (both within AMS and on the archaeology information forms) are reviewed by the Commission archaeology staff for accuracy and appropriateness.

5. Archaeology reports resulting from a field investigation (Archaeological Impact Assessment (AIA) or Preliminary Field Reconnaissance (PFR)) may be submitted at numerous points during the application (or pre-application) process, depending on the timing of the field assessment. However, all reports must be uploaded by the applicant or oil and gas activity permit holder as soon as they are received from the archaeologist and preferably at the time of application. Reports must be uploaded under the Archaeology Report dropdown option. For post-permit issuance uploads of archaeology reports, see point 7.

- Reports with no recovery of an archaeology site during an impact assessment:

  If no archaeological resources are found during a field assessment the AIA or PFR report must be uploaded as soon as possible, but no later than 60 days after the project construction has been completed. Inclusion of a completed archaeological impact assessment report greatly facilitates a number of reviews during the application process, including the Commission's archaeology review and the First Nations consultation processes.

- Reports finding an archaeology site during an impact assessment:

  If an archaeology site has been found within a proposed development area, an AIA report detailing the field work is due immediately. Construction work must not proceed near the area of concern until the report is approved by the Commission. The following steps must be followed when archaeological resources are encountered during an archaeological impact assessment:
i. The permitted archaeology consultant responsible for the field assessment must discuss mitigation strategies with the oil and gas applicant and present the results of the assessment and proposed mitigation strategies within the context of a draft AIA report.

ii. The report is submitted to the Commission for approval of all mitigation strategies pertaining to the new archaeology site. Submissions must be made via Arch.Submissions@bcogc.ca for review and approval.

iii. Once the report has been reviewed, the Commission provides formal notification to the applicant and the archaeologist regarding approval or decline of the report and recommendations within.

iv. Once an approval letter is received from Commission archaeology staff, the applicant must upload the report and approval letter into AMS.

The mitigation review and approval procedures discussed above are currently in place and have been established over the past decade; they have proved to be the most efficient manner to approach site recoveries and facilitate communication among Commission staff, clients and archaeologists. The only change to the process associated with the implementation of AMS is the required upload of the approval letter.

Since the implementation of AMS in July 2016, the Commission has observed that the most accurate application submissions for archaeology information are those where the archaeologist has access to and enters the information into the archaeology tab in AMS. Granting the permitted archaeologist these permission greatly reduces the need to move applications into revision.

6. Archaeology site alteration permits are reserved for unique scenarios where a project cannot avoid disturbing an archaeology site. The applicant or oil and gas activity permit holder must apply to the Commission for a permit issued under Section 12 of the Heritage Conservation Act specific to the activity that will be carried out. These permits are applied for independent of AMS and an upload of
the permit application into the system is not required at the time of development application submission. However, if prepared upload all documents pertaining to the Section 12 permit application under “Other Archaeology Document”.

7. To upload an archaeology report post permit issuance, open Kermit External and select the ‘Post Permit Actions’ tab. Under the heading ‘Permits’, click ‘Find Permits’ and enter the AD# or Legacy OGC File#. Press search. Click on the AD# and click the ‘Attachments’ tab. Under the heading ‘Post Approval Attachments’ click on ‘upload.’ An upload prompt will appear, click +Add files and select the file for upload, select document type ‘Archaeological Assessment Report.’ Click ‘start upload.’ Press save.

8. All documents relating to the archaeology component of applications must be retained by oil and gas applicants and are subject to review by Commission staff during formal or informal audit processes. These records include application information, assessment information and communication documents between the client and the archaeologist.

Please Note:

Full processes and expectations for the annual audit of archaeology management systems are outlined in the Commission’s Archaeology Audit Program Procedure Manual and available online here.

5.5.2 Guiding Legislation and Regulations

Applicants are responsible and accountable for ensuring that planning and development activities comply with the Heritage Conservation Act (HCA), Oil and Gas Activities Act (OGAA) and all supporting Commission policies and conditions of permit. The Commission’s archaeology application requirements are based on HCA and OGAA and the Commission endeavors to ensure applicants remain within these legislative and policy requirements. Special conditions for archaeology may be added to development permits for clients to facilitate the protection of archaeological resources.

All archaeological sites are protected under the HCA. This protection is not affected by an error or omission in the Provincial Heritage Register or by failure to register
property in the Provincial Heritage Register. The Heritage Conservation Act protects all archaeological sites whether on private or public lands. Under Sections 13 (1) and (2) of the HCA:

- Archaeological sites are protected against any damage. This protection applies to all sites, regardless of whether they are located on Crown or private lands.

Under Section 36 of the Heritage Conservation Act:

- Anyone found to be in contravention of Section 13 (1) or (2) is liable for a fine or imprisonment.

**Heritage Conservation Act Site Alteration Permit, Section 12**

Under OGAA a specified enactment with provision for Section 12 of the HCA:

- Section 8 (1) authorizes the Commission, instead of the Archaeology Branch of FLNRO, to issue site alteration permits to oil and gas clients when an archaeology site cannot be practically avoided.

This authority is for oil and gas developments within the entire province of B.C. but does not include projects subject to Canadian Energy Regulator (CER) review and approval.

**Heritage Conservation Act Inspection Permits, Section 14**

The Archaeology Branch of Ministry of Forests, Lands and Natural Resource Operations issues permits under Section 14 of the HCA, RSBC 1996, c. 187 to all qualified archaeologists who want to conduct archaeological field investigations in the province of B.C. (i.e. those who want to conduct AIA work). The responsibilities relating to these permits are outlined in the application and terms and conditions of the permit.

For archaeologists working in northeast B.C. the Commission monitors and ensures compliance by archaeologists with the terms and conditions of these permits through...
report reviews and field visits. A Protocol Agreement between the Oil and Gas Commission and the Archaeology Branch guides the review of work conducted under an inspection permit. Any breach of permit or deficiency in work is reported to the Archaeology Branch and may affect future permit eligibility.

Clients hiring archaeologists to conduct assessments on proposed development areas must be familiar with the terms and conditions of the HCA Section 14 inspection permits and sign the permit to acknowledge understanding of the commitment and approach by the archaeologist. Clients should understand that the permit holder must work according to and fulfil the obligations set out within each permit.

5.5.3 Supporting Information

Conducting an Archaeological Impact Assessment (AIA)

Archaeological field work involving survey and sampling (ground truthing and testing) is typically referred to as an Archaeological Impact Assessment (AIA). An AIA is conducted prior to any on-the-ground development activities. An AIA where no testing has been conducted may be referred to as a preliminary field reconnaissance or PFR. The results of an AIA or PFR are detailed in a written report.

An AIA (field testing and verification) may be completed at any time before or during the application and review period or after a permit has been issued. However, all archaeology field work must be completed prior to any ground altering activities.

Compliance as it Relates to a Professional Reliance and Results Based Regulatory Review

Compliance with the requirements of the Heritage Conservation Act (HCA), Commission policies, guidelines or associated legislation and conditions of permit must be adhered to. If a company is found by the Commission to be in non-compliance with any requirements, the company may be excluded from the expedited archaeology review stream until all issues have been resolved. During this period the client must ensure all archaeological requirements are met and reports are submitted to the Commission before the archaeology component of the application review will be
completed. In other words, development permit will not be issued until all reporting is submitted and approved by Commission archaeology staff, which could result in significant delays.

These sanctions do not exclude the client from further penalties, which may be imposed by the Commission or the Province of British Columbia under Section 36 of the HCA.

5.5.4 List of Supporting Materials

Types of reports

Archaeological Overview Assessment (AOA): An AOA is largely a desktop review of available literature including reports, ethnographic studies, site inventory records and physiographic mapping. The resultant report describes the subject area’s potential for containing archaeological resources and may provide recommendations if appropriate.

Archaeology Impact Assessment (AIA):

An AIA refers to archaeological field work conducted prior to any on-the-ground development activities. Subsurface shovel testing of areas deemed to have archaeological potential may be conducted to identify archaeological sites within the proposed project area. An AIA where no testing has been conducted may be referred to as a preliminary field reconnaissance or PFR.

Archaeology Impact Assessment Report (AIA report):

The results of an AIA are detailed in an AIA report.

Preliminary Field Reconnaissance (PFR):

PFR refers to a field inspection that establishes if a subject area contains archaeological potential. Most often, if a PFR is conducted and the application area is found to contain archaeological potential, the attending archaeology company will perform a full AIA to save time and money for their client.
An archaeologist may also downgrade an AIA to a PFR if the intended AIA area proves to have no archaeological potential. The results of the field inspection would be detailed in an AIA or PFR report.

Preliminary Field Reconnaissance Report (PFR report):
The results of PFR are detailed in a PFR report.

Other reference terms

Administrative Change:
For the purposes of the archaeology review, an Administrative Change refers to a modification that has no new land-based disturbance activities. Examples of administrative changes are a transfer of road tenure, document corrections, amendment applications with no ground disturbance or clearing activities anticipated and reduction of application area. In the case of a reduced application area, the new smaller applied for area must be contained within the original applied for area. If the reduced area is because of archaeology concerns, an AIF must accompany the revised, amended or new submission. Any revision to components that involve an increase in size, change in shape or position, is not considered an administrative change.

Archaeological Potential:
Archaeological potential refers to the possibility that archaeological resources may be present within a defined area. Potential is determined through examination of sets of variable criteria that change according to geographic location and geophysical characteristics.

Archaeology Audit Program (AAP):
The Commission conducts audits of oil and gas clients’ archaeology management systems. The audit supports a professional reliance and results based regulatory review of the archaeology portions of applications.
Archaeology Branch:

The Archaeology Branch of FLNRORD is responsible for distributing archaeological information regarding the management of archaeological resources in British Columbia. In terms of provincial oil and gas projects, the Branch is authorized to issue permits to archaeologists under section 14(2) of the Heritage Conservation Act (HCA).

Borden Number:

The Borden Numbering system is a naming convention created by Charles Borden for archaeology sites found in Canada. A unique set of letters and digits are assigned to every new archaeology site as they are recorded in the provincial database. Based on the geographic location of a site, letters are assigned from a map index and have the following format structure: AaBb-0001. The number after the hyphen indicates the order in which the site was found within a particular Borden Block. For example, the first site found in block AaBb would be assigned AaBb-0001, the second AaBb-0002, etc.

Heritage Conservation Act (HCA):

The HCA is the legislation that protects heritage property in British Columbia. Under Sections 13(1) and (2) of the HCA, archaeology sites are protected against any damage. This protection applies to all sites, regardless of whether they are located on Crown or private lands. Under Section 36, Offence and penalty, anyone found to be in contravention of Section 13 (1) or (2) is liable for a fine and/or imprisonment. This protection is not affected by an error or omission in the Provincial Heritage Register or by failure to register property in the Provincial Heritage Register.

Permitted Archaeologist:

An experienced archaeologist who holds a permit under Section 14 of the HCA. For the purpose of conducting archaeological impact assessments. Clients are expected to engage an archaeologist with a valid permit within the area of application for all review and recommendations.

Professional Reliance and Results Based

This approach to application review for archaeology was introduced to facilitate the processing of applications without delaying entire applications for archaeology requirements. The professional reliance review process for archaeology at the
Commission is based on the assumption that oil and gas clients contract permitted archaeologists to provide recommendations that are then passed on to the Commission. Although the onus for protecting archaeological resources is placed on the applicants, the Commission's archaeology unit provides support for both individual application processing and entire archaeology resource management systems.

The Commission’s expedited review allows applications to be processed prior to the completion of archaeological assessments or submission of reports for those assessments. Exceptions and expectations for this advantage may be modified based on situation or performance.

Associated with a professional reliance and results based approach is the Commission’s Archaeology Audit Program (AAP) (see definition for AAP).

**Protocol Agreement with the Archaeology Branch of FLNRO:**

Under a Protocol Agreement with the Archaeology Branch, the Commission guides and reviews the work carried out by archaeologists in northeastern British Columbia. The Commission’s jurisdiction is currently restricted to the Fort Nelson, Peace and Mackenzie Forest districts.

**Remote Access to Archaeological Data (RAAD):**

RAAD is a web interface that is used to access archaeological site data and is maintained by the Archaeology Branch of FLNRO. All recorded archaeological sites within the province of British Columbia are entered into this database. Access to this information is subject to authorization granted by the Archaeology Branch and is limited to government agencies with land or resource management responsibilities, first nation governments, and professional consulting archaeologists. Site information contained within RAAD can be provided to clients, agents etc. by the Archaeology Branch, upon request. Coordinates of sites provided by RAAD should be verified using site maps and location descriptions available via RAAD or from the Archaeology Branch.

**Site Alteration Permits, HCA Section 12:**

A permit may be issued under Section 12 of the HCA if impact to an archaeological site cannot be practically avoided. These permits allow applicants to alter a known
archaeological site within the confines of special terms and conditions outlined in the permit.

Under OGAA a specified enactment with provision for section 12 of the HCA, authorizes the Commission to issue site alteration permits to oil and gas clients when an archaeology site cannot be practically avoided. This authority is for the entire province of B.C. for oil and gas developments and the Commission’s authority is in place of the Archaeology Branch’s. The Commission’s powers do not include projects that are subject to Canadian Energy Regulator (CER) review and approval as CER projects are specifically excluded from this provision.

All archaeology forms and documents are found on the Commission’s archaeology manuals, guidelines and forms page at http://www.bcogc.ca/industry-zone/documentation/Archaeology.

5.5.5 Archaeology: Data Field Completion

Table 5-E below provides detailed instructions for each of the data fields requiring input (not auto populated) within the Application Management System.

Table 5-E: Application Instruction Table for the Archaeology Tab

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Change Only</td>
<td>Administrative changes are those with no land impact or reduction in application area as long as the reduced area is contained within the exact original on-the-ground space of the original application. Indicate yes, if changes made have no associated field activities. i.e. name changes or corrections to plans only.</td>
</tr>
<tr>
<td>Administrative Change Description</td>
<td>Provide a brief description of the changes included in the application. If an application is for an amendment it must be clearly stated as “amendment with no ground disturbance or clearing anticipated”.</td>
</tr>
<tr>
<td>Label</td>
<td>Instructions</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Sources to Identify Archaeological Potential</td>
<td>Provide a list of the data sources used, such as plan maps, RAAD, orthophotos, previous assessment report, etc. to establish archaeological potential. Construction plan map job no, revision number and revision date used for the archaeology review must be cited. If a construction plan was not used, provide details of mapping source used to identify project location and for the review and evaluation of archaeological potential.</td>
</tr>
<tr>
<td>Areas Containing Archaeological Potential</td>
<td>Indicate if any or all portions of the proposed application area has the potential to contain archaeological resources.</td>
</tr>
<tr>
<td>Specify Factors Used to Assess Potential</td>
<td>List the physical landscape features used to determine whether or not archaeological potential exists within the application area. (i.e. prominent ridge, river bench, knoll surrounded by wetlands, saturated terrain with black spruce, steep slopes, etc).</td>
</tr>
<tr>
<td>Archaeology Report Attached</td>
<td>Indicate if an archaeology report is attached.</td>
</tr>
</tbody>
</table>

**Non-Geophysical Archaeology Information**

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archaeology Site within 200m</td>
<td>Does the provincial data base, RAAD, indicate there are archaeological sites within 200 metres of the proposed activity area? Permitted archaeologist checks RAAD, the provincial data base, for known sites in proximity to proposed application area and lists. The distance is measured from the edge of the site to the closest point within the proposed development.</td>
</tr>
<tr>
<td>Borden Number(s)</td>
<td>List the Borden numbers of all sites within 200 metres of the proposed development must be listed here.</td>
</tr>
<tr>
<td>Distance from Borden # to Oil &amp; Gas Development (m)</td>
<td>Indicate distance (in metres) from the closest edge of the archaeological site to nearest point on application area.</td>
</tr>
<tr>
<td>Has field work been completed?</td>
<td>Indicate if all the field work has been completed for the project. If any portion of the assessment is outstanding, indicate no.</td>
</tr>
<tr>
<td>Type of Field Work Completed</td>
<td>If an archaeological field assessment was completed, select the type of field work completed from the drop down list.</td>
</tr>
<tr>
<td>Is field work required?</td>
<td>If no archaeological assessment was completed at the time of application, indicate if one is required. A permitted archaeologist must evaluate each project and determine if an archaeological assessment is required.</td>
</tr>
<tr>
<td>Label</td>
<td>Instructions</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Type of Field Work Required</td>
<td>If an archaeological assessment is required, select the type of field work required from the drop down list as determined by the permitted archaeologist.</td>
</tr>
<tr>
<td>Archaeological Site Identified</td>
<td>List sites recovered during the assessment of the proposed application area. Borden numbers are unique identifiers assigned by the province for each newly recovered site.</td>
</tr>
<tr>
<td>Borden Number</td>
<td>If field work was completed and archaeology site(s) found, list the Borden numbers of the site(s) recovered during the assessment of the proposed application area.</td>
</tr>
<tr>
<td>Site Mitigation Description</td>
<td>Briefly describe how the applicant plans on managing for the newly recovered archaeology site. For every site in conflict with the proposed project, a mitigation plan must be in place and detailed on the archaeological impact assessment report.</td>
</tr>
<tr>
<td>Has Commission Archaeology Staff Approved the AIA Report?</td>
<td>When an archaeology site(s) is recovered on an application/project area, an AIA report must be submitted to the Commission’s archaeology unit as soon as possible. The report must outline how the site will be managed for and no project can proceed without approval of the site management strategies. Indicate yes if an approval for the report has been received from Commission archaeology staff and upload the approval letter. A report outlining management strategies are also required should a new project be in conflict with a previously recorded site.</td>
</tr>
<tr>
<td>Is a Site Alteration Permit Required?</td>
<td>If a project cannot avoid disturbing an archaeology site, the operator must apply to the Commission for a permit issued under section 12 of the Heritage Conservation Act. Indicate if there is intent to submit a permit application under section 12 of the HCA. Indicate unknown if this has not been determined.</td>
</tr>
<tr>
<td>Geophysical Archaeology Information</td>
<td></td>
</tr>
<tr>
<td>Are There Known Archaeology Sites in Conflict with the Geophysical Program Including Line Shift Variance?</td>
<td>Does the provincial data base, RAAD, indicate there are archaeology sites within 200 metres of the maximum proposed line variance? A site is considered to be in conflict if it is located within 200 meters of the outside line variance.</td>
</tr>
<tr>
<td>Label</td>
<td>Instructions</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Is Field Work Required?</td>
<td>The requirement for any assessment is determined by a permitted archaeologist. If any type of field assessment is recommended by a permitted archaeologist, indicate yes.</td>
</tr>
<tr>
<td>Type of Field Work Required</td>
<td>The permitted archaeologist will determine the type of archaeology assessment best for the proposed program area. Choose the type of field work required from the drop down list.</td>
</tr>
<tr>
<td>Other Type of Assessment</td>
<td>The option of 'other' is only chosen if the type of work recommended is not located in the drop down. Provide a detailed description of the 'other' type of field work intended.</td>
</tr>
<tr>
<td>Site Flagging Required</td>
<td>If the archaeologist’s search of RAAD finds archaeology sites within 200 meters of the program’s maximum proposed line variance, there is a requirement to have the sites flagged for protection by a qualified archaeologist. Indicate yes, if known archaeological sites are in conflict with the program.</td>
</tr>
<tr>
<td>Borden Number</td>
<td>Enter the Borden number(s) of the archaeological site(s) in conflict with the program. Borden numbers are assigned to each archaeology site recorded in the provincial registry (RAAD).</td>
</tr>
<tr>
<td>Flagging Completed Date</td>
<td>Provide the date(s) that flagging of known archaeological sites was completed. If the flagging has not been completed, leave this field blank.</td>
</tr>
</tbody>
</table>
5.6 Environmental Stewardship

Submission of an application for an oil and gas or associated activity must include additional application deliverables specific to environmental stewardship. The required stewardship deliverables vary based on the planned activity.

The stewardship tab requires specific application information details. This section includes a brief overview of stewardship, guidance regarding stewardship planning and design, details related to stewardship information requirements and detailed instructions for completing the data fields within the stewardship tab.

The Commission’s Environmental Protection and Management Guideline (EPMG) provides specific guidance for applicants and should be thoroughly reviewed in addition to this section of the manual.

Please Note:

This manual is written as a whole and provided to industry in sections to allow permit holders to access activity chapters. It is prudent of the permit holder to review the manual in its entirety and be aware of the content in other sections of the manual.
5.6.1 Environmental Stewardship Planning & Design

Companies must adhere to the Environmental Protection and Management Regulation (EPMR) of the Oil and Gas Activities Act (OGAA) in order to conduct oil and gas activities. Section 25(1) of OGAA states:

- The Commission may issue a permit if, after considering government’s environmental objectives, the applicant meets the requirements of those objectives.

The Environmental Protection and Management Regulation (EPMR) establishes the regulatory requirements for stewardship of environmental values and features in the course of carrying out oil and gas activities. The EPMR applies to oil and gas activities on Crown land but does not apply to subsurface aspects of oil and gas activities nor private land.

The EPMG provides guidance for applicants and permit holders in meeting the requirements of the Environmental Protection and Management Regulation.

Applicants and permit holders must plan oil and gas activities to avoid and/or minimize impacts to environmental values, mitigate impact where no realistic opportunity exists to avoid, and/or restore the impacted area to its pre-development state. General protection and management approaches must continue during the operational stages so adequate management controls are in place and monitor operations to identify further opportunities to reduce environmental impacts.

Government Environmental Objectives

Government’s environmental objectives requiring management and protection are identified in the EPMR and further explained in the EMPG and includes:

- Water supply well.
- Riparian reserve zones.
- Wildlife and wildlife habitat areas:
- Ungulate winter range.
- High priority wildlife.
- Wildlife tree retention areas.
- Wildlife habitat features.
- Old growth management areas.
- Fisheries sensitive watersheds.
- Resource features.
- Cultural heritage resources.

Applicants should provide all relevant information with the application so the Commission may make an informed decision while maintaining the values identified as Government environmental objectives. The consideration of a material adverse effect or change to an environmental value, whether material or adverse, is considered based on all available information.

**Area-based Analysis to Guide Planning and Design**

The Commission’s Area-based Analysis (ABA) approach should be utilized when planning for oil and gas activity. ABA approach helps to minimize cumulative impacts on the landscape, reduce the footprint of activities, and shorten restoration / reclamation timeframes on specific resource values.

The Commission gathers and analyzes existing information and data on development activities in identified areas. Specific resource values such as old forest and riparian reserve zones wildlife areas and old growth management areas are made available at the [area-based analysis information page](#) on the Commission’s website. Applicants should review the information when planning the location of oil and gas activities including:

- Spatial datasets showing the location of enhanced management and regulatory policy areas for use in development planning.
- Current area-based conditions in the development planning area.
- Area-based analysis frequently asked questions.
Projects should be planned to minimize disturbance where possible. For example:

- Use existing disturbance, unless doing so would result in a greater disturbance, greater safety risk, significant operational difficulty and/or negative environmental impacts.
- Consider low impact seismic techniques such as wireless technology and meandering lines.
- Use common access and shared corridors.
- Consider using winter access in old forest and riparian reserve zones.
- Leverage use of directional drilling and multiwell pads to minimize disturbance.
- Implement strategies to expedite reclamation.

During the development planning process applicants should review existing disturbance on the landscape and coordinate where possible to minimize impact on the resource values identified in the area-based analysis.

If an activity proposed in Northeast British Columbia is impacting an ABA enhanced management or regulatory policy area, an ABA specific mitigation strategy must be attached to the application. Guidance on completing mitigation requirements is available in the Commission’s Supplementary Information for Area-based Analysis document.

### 5.6.2 Environmental Protection and Management Requirements

Part 3 of the EPMR prescribes operational requirements applicants must consider and applications must adhere to in relation to:

- Water quality (for operating areas and adjacent areas).
- Aquifers.
- Crossings of streams, wetlands and lakes.
- Deleterious materials into streams, wetlands or lakes (oil and gas activities must not result in any deleterious material deposited).
- Operations within wetlands.
- Natural range barriers.
- Invasive plants.
- Forest health.
- Soil conservation.
- Seismic lines.
- Restoration of operating areas.

Applications must meet these operating requirements. If an applicant requires an exemption on the application according to the provisions of Part 3, an exemption request must be included in the permit application submission to the Commission.

### 5.6.3 Application Requirements Specific to Environmental Stewardship

#### Environmental Features Established by Order

The EPMR (Part 4, Division 2) identifies and establishes environmental features defined through legislative acts and provincial ministerial orders.

The majority of the features are spatially identified. Where an activity is planned within a spatially identified environmental feature area, the Application Management System automatically indicates the intersecting or overlapping features.

While some features established in Section 25 of the EPMR are not spatially identified, all features must be identified during activity planning and included on the activity application construction plan.

Some Part 4, Division 2 features are not formally identified by order; however, applicants should consult the EPMG as some features are established through other mechanisms for planning and operations, when known to the applicant or encountered in the field. Examples include wildlife habitat features and Old
Grown Management Areas (OGMA).

If activities are planned to intersect features identified in EPMR Part 4, Division 2, a rationale or mitigation plan must be included as part of the permit application. Users may be able to provide this information within the rationale text box; or, for longer rationales, provide a mitigation plan.

**Areas Established by the Commission**

The Commission has identified environmental features and established these areas as requiring specific application guidance. They include:

- Peace Island Park area is identified as a sensitive area, having high public use and recreation value. For all applications, the Commission encourages industry to avoid operations in this area. While applications in Peace Island Park are accepted, they are subject to an enhanced review and engagement process.

- Pink Mountain Borrow Pit is identified as an emergency source of water for fire suppression for the town of Pink Mountain. For all applications, the Commission encourages industry to avoid operations in this area.

- Lynx Creek Boat Launch is identified as an area with recreational value built and maintained by the District of Hudson’s Hope. For all applications, the Commission encourages industry to avoid operations in this area. While applications in the Lynx Creek Boat Launch area are accepted, they are subject to an enhanced review and engagement process.

- Twidwell Bend is identified as an area with public use and recreational value. While applications in Twidwell Bend are accepted, they are subject to an enhanced review and engagement process.

- Wonowon Borrow Pit is identified as an emergency source of water for fire suppression for the town of Wonowon. For all applications, the Commission encourages industry to avoid operations in this area.
Aitken Creek Gas Storage Reservoir area is subject to a special project order under OGAA. Well applications in this area which are identified as having planned drilling near or through this gas storage reservoir are subject to an enhanced review. Special permit conditions may be attached to well approvals in this area to protect the integrity of the gas storage reservoir.

Applications in areas established by the Commission must be submitted with a mitigation plan indicating the strategy for protection of the values identified for the area. Users may be able to provide this information within the rationale text box; or, for longer rationales, provide a mitigation plan.

Identifying Water Works, Water Supply Wells and Aquifers

- Water works and water supply wells: identify all known waterworks and water supply wells within 100 metres of the proposed operating area (excluding geophysical operations) as part of the activity application construction plan. Known waterworks information is obtained from the BC Geographic Warehouse (BCGW). For private land, waterworks location information is obtained from land owners.

- Aquifers and groundwater recharge areas: Applicants must identify in permit applications all known aquifers potentially impacted by the activity, regardless of the distance from the proposed operating area.

Where water works or water supply wells are within 100 metres of a proposed development, a mitigation plan must be included in the corresponding permit application to the Commission.

Activities Intersecting with Resource Management Zones

B.C. Land or Coastal Marine Plans provide increased assurance of, and form the foundation for, balanced solutions meeting economic, environmental, social and cultural needs throughout the province. The plans inform both government decision makers and persons seeking natural resource development opportunities.
Proposed oil and gas activities should be reviewed before application in the context of any applicable Land or Coastal Marine Plan. Projects should conform to the objectives established for the plan management zone in which the project is proposed.

Where projects fall within special management zones or the equivalent, applicants are expected to provide a rationale detailing:

- Why the activity must occur within the special management zone or equivalent.

- What planning and/or operational measures (present and future) are being taken to mitigate impacts to the values identified for the zone.

- What planning and/or operational measures (present and future) are being proposed to mitigate impacts to the values identified for the zone.

Users may be able to provide this information within the rationale text box; or, for longer rationales, provide a mitigation plan.

**Activities Intersecting Parks, Protected Areas or Ecological Reserves**

Oil and gas activity is not generally allowed within parks, protected areas or ecological reserves. However, there are extenuating circumstances where the Commission may consider applications for activities proposed within these areas. Before submitting an application for activity within a park, protected area or ecological reserve, applicants should contact the Commission.

If oil and gas activities cannot adhere to the guidance recommendation then justification may be required. The justification should detail why it is necessary to operate within the park, protected area or ecological reserve, and a mitigation strategy. Park Use Permits issued by the BC Ministry of Environment and must also be attached to the permit application.
5.6.4 Regulatory Exemptions

Exemptions occur where applicants and/or permit holders are pursuing approval for non-compliance with the regulation. If an exemption is requested from regulatory requirements, an exemption must be prepared at the time of application and include:

- Specific regulatory provision requiring an exemption.
- Rationale for exemption (explanation of why an exemption is required).
- Proposed plan showing mitigation strategies to reduce impacts.

If exemptions are approved prior to the application, this approval must be attached to the application.

The Commission may exempt oil and gas operators from one or more of the environmental protection and management requirements for a specific operating area or an adjacent area. The exemption request must demonstrate that it is not reasonably practicable for the activity to comply with the requirement, and must be reviewed and approved by the Commission.

5.6.5 Guidance Variations

If oil and gas activities cannot adhere to the Commission’s guidance recommendations, a rationale must be included in the permit application, along with specifics of the guidelines not followed, an explanation of why they cannot be followed, proposed plan and mitigation strategies.

5.6.6 Mitigation Plan Requirements

Mitigation plans outline how potential adverse impacts to a feature, species or value are to be avoided or minimized. This section provides guidance to prepare and submit a mitigation plan as part of a permit application.
Mitigation plans must be completed by the applicant and a qualified professional, hired by the applicant. The qualified professional must have an appropriate background relevant to the species, feature or value being addressed in the mitigation plan. The mitigation plan relies on a professional reliance model, whereby the professional presents and upholds the appropriate mitigation and the applicant upholds the terms of the mitigation strategy as part of the permit.

**Mitigation Hierarchy**

In planning oil and gas activities, environmental values should be avoided, minimized, mitigated and/or restored in that hierarchy. The mitigation hierarchy must be followed and a rationale for moving through the order hierarchy must be provided. Strategies should describe the science that supports the effectiveness of the types of mitigation measures being proposed and the validity and reliability of that science. This should include a description of any potential barriers to the mitigation measures being implemented including logistical uncertainty. The mitigation hierarchy is further detailed as:

- **Avoidance** means to fully avert any potential impact on one or more environmental values resulting from a project or activity. The first priority in mitigation planning is to avoid the impacts to the environmental values and associated components occurring within the footprint area of influence for the duration of the proposed project or activity.

  **Please Note:**
  
  If the value cannot be avoided, the proponent must demonstrate the alternative options explored in the location planning stages for the project or activity.

- **Minimization** means to partially avoid or reduce the level of impacts on one or more environmental values resulting from a project or activity. Minimize is the second level in the mitigation hierarchy, and should be considered only when measures to fully avoid impacts on environmental values and associated components have been duly exhausted, or where avoidance is not practicable given the situation.

- **Mitigation** includes measures aimed at lessening impacts on environmental components, after steps have been taken to avoid and minimize potential impacts. Measures should consider the same parameters as minimization techniques (above), and should also identify...
the desired end condition, and how the proposed mitigations will meet those desired end conditions.

- Restoration includes measures carried out within the footprint of the oil and gas activity and would be over and above any restoration requirements under Section 19 of the EPMR. Restoration must attempt to counterbalance or compensate any losses due to impacts on ecological systems. On-site restoration measures should include a description of the future site condition and planning for the future state relative to the current condition. The plan should include time frames to achieve future site condition targets.

A rationale should describe how the various steps in the mitigation hierarchy were considered and why it was considered reasonable to move to the next step in the hierarchy. Moving through the hierarchy may be more of an iterative process and not completely linear, but the intent is to document the rationale and thinking.

**Multiple Environmental Values**

Government’s environmental objectives include water, riparian reserve zones, wildlife and wildlife habitat areas, old growth management areas, fisheries sensitive watersheds, resource features and cultural heritage resources.

Where multiple environmental values are identified, a mitigation hierarchy rationale and plan must be provided for each value.

**Mitigation Plan Requirements**

All mitigation plans must include the following key components:

- **Value identification.** Identify the species, feature or value potentially impacted by the proposed activity.

- **Rationale for the oil and gas activity to operate in a location or in a timeframe that cannot be avoided.** When the operations impact a species or value and the location or timing of project cannot be moved, an explanation of why activities are unavoidable and a rationale for not
being able to avoid impacting the value must be presented in the plan.

- Site specific information as it directly relates to the project. Include photos and any information to justify the activity.

- Operational modifications and strategies to minimize, mitigate and restore impact to the species, feature or valued identified should be explained. Include an explanation of how the modifications are expected to minimize impacts or reduce risk.

- Project monitoring plan to outline how the effectiveness of the proposed operational modifications are measured, monitored and reported. Include specific benchmarks for measuring and monitoring and contingency plans for alternative planning needs and reporting timelines and responsibilities.

Include any other information including data, information sources, and other relevant information to support the mitigation plan and assist the Commission in rendering a decision on the application. Missing components or information not applicable to the specific mitigation plan must be explained and justification for the omission providing within the plan. Indicate component and provide an explanation of why it is not applicable, within the plan. Mitigation plans with missing or incomplete components from the list above will be deemed incomplete and will not be accepted by the Commission.

All plans must be signed off by a qualified professional relevant to the environmental component(s) addressed in the mitigation plan. The qualified professional must also include a statement outlining how the measures contained in the mitigation plan prevent the proposed oil and gas activity from having an impact on the species, feature or value.

### 5.6.7 Stewardship: Data Field Completion

Table 5-F below provides detailed instructions for each of the data fields requiring input (not auto populated) within the Application Management System.
### Table 5-F: Application Instruction Table for the Stewardship Tab

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has the applicant received an applicable park use permit?</td>
<td>Indicate if a park use permit has been received.</td>
</tr>
<tr>
<td>Permit Number</td>
<td>Provide the park use permit number received and upload a copy.</td>
</tr>
<tr>
<td>Provide Rationale (optional)</td>
<td>If no park use permit has been received, provide a rationale why the activity must be carried out within a park.</td>
</tr>
<tr>
<td>Provide Rationale (optional)</td>
<td>If the area overlaps an “Area Established by Order” provide a rationale or upload mitigation plan under the Attachments Tab-Stewardship-Mitigation Strategy.</td>
</tr>
<tr>
<td>Provide Rationale (optional)</td>
<td>If the area overlaps an “Area Established by OGC” provide a rationale or upload mitigation plan under the Attachments Tab-Stewardship-Mitigation Strategy.</td>
</tr>
<tr>
<td>All activities included in this application will be planned and carried out in accordance with the planning operation measures outlined in the Environmental Protection and Management Guideline</td>
<td>If the activity is not planned in accordance with the Environmental Protection and Management Guideline (EPMG), a mitigation strategy or rationale is required.</td>
</tr>
<tr>
<td>Is an exemption requested from Part 3 of the Environmental Protection and Management Regulation</td>
<td>Indicate if an exemption from Part 3 the EPMR is required.</td>
</tr>
<tr>
<td>Exemption From</td>
<td>Indicate the section of Part 3 of the EPMR from which the exemption is required.</td>
</tr>
<tr>
<td>Exemption Explanation</td>
<td>Provide a detailed explanation / rationale for the regulatory exemption request. Include statements indicating why the regulation cannot be followed, proposed alternate strategies and mitigation.</td>
</tr>
</tbody>
</table>
5.7 Maps and Plans Information Tab

Maps and plans support activity applications and are required depending on the oil and gas and associated activity selected and the technical and engineering information provided. This section provides detailed instructions of the Commission’s requirements for uploading maps and plans.

This section provides details on maps, construction plans and emergency planning requirements which are critical for all applications.

Please Note:

This manual is written as a whole and provided to industry in sections to allow permit holders to access activity chapters. It is prudent of the permit holder to review the manual in its entirety and be aware of the content in other sections of the manual.

5.7.1 Map Detail

Every application must include a complete set of maps and plans illustrating in detail the location and extent of planned activities. BCGS Map sheet(s) refer to all BC Geographic Series map sheets (BCGS) and must include all areas affected by the proposed activity. Hand sketches are not acceptable as map attachments. Maps include:

1) 1:20,000 Maps:
   - Project area along with brief description of all proposed areas e.g. "Proposed 10x30m Workspace (new cut)".
   - Beginning and end UTM coordinates for all linear proposed project.
- Permitted projects in the area (existing wellsites, pipelines, sumps, ancillaries).
- All access roads.
- Seismic/Trails.
- Cut blocks and woodlots.
- Contours.
- Trappers, Guides and Range Tenures.
- Water features (including labels).

2) 1:50,000 Maps:
- Project area.
- Permitted projects in the area (existing wellsites, pipelines, sumps, ancillaries).
- All access roads.
- Seismic/Trails.
- Cut blocks and woodlots.
- Water features.

3) 1:250,000 Access Maps:
- Access to project.
- Access description text box marking out km to project showing all route changes.
- Project area.
- Trapper boundaries and numbers, Guides and Range Tenures.
- Water features including labels.

4) Diversion map (at appropriate scale) required for all short-term use of water applications to illustrate in detail the location and extent of planned activities. The map should include the following:
- Include access to each diversion.
- Show existing tenures impacted. (e.g. Rights Holders as per WSA, tenured water source dugouts)
- Surveyed Crown land (District Lot Numbers, sections, etc., including theoretically surveyed Crown land posted, but not titled).
Unsurveyed Crown land.

Private land should indicate the owner name, parcel identifier number (PID no.), title number.

Water features.

5) All maps should clearly indicate:

- Applicant name.
- Project name.
- Map date.
- NTS and BCGS map sheet numbers on legend and on maps.
- North arrow.
- Version number (i.e.: revision #1, amendment #1).

Applications should have a single set of maps applicable to the entire application, not individual sets of maps per activity within the application.

In addition, applicants should include and/or consider:

- Total area of Crown land in hectares and matching what is shown on the construction plan, including the OGAA activity and any related associated oil and gas activity.

- Total area of private land indicated in hectares and matching what is shown on the construction plan, (same as above).

- Total area within MOT rights-of-way.

- Where applied for, construction corridors should be shown on all maps using a dashed line indicating “construction corridor”. The construction plan must clearly identify proposed activities, proposed location(s), and the total proposed area of each activity within a defined construction corridor. See Figure 5-E for an example.

- UTM coordinates: from and to locations.
5.7.2 Construction Plans

Construction plans inform the Commission about the company’s plans for constructing the proposed works, including details about the location and size, associated oil and gas activity sites and other details of the project’s development. Applicants must include construction plans with permit applications. See Figure 5-F for an example.

Amendments to permissioned areas should show all changes.

This section provides instructions on the requirements for all construction plans plus additional information required for specific authorizations including facilities, pipelines, wells, roads and water.
Figure 5-E: Sample Wellsite Review Corridor Map
5.7.3 Construction Plan Basic Requirements

The basic requirements for a construction plan must include:

1) Label on plan indicating:

- North arrow.
- Dimensions and area of Crown land.
- Dimensions and area of linear segments, if applicable.
- Location of Agricultural Land Reserve (ALR), if applicable.
- NTS and/or DLS coordinates (units, block, and group).
- Chainages.
- Deflections.
- Crossing numbers, if any, to correspond to the table of crossings.
- Vegetation changes (brush/tree types).
- Dimensions and area of associated oil and gas activity sites (decking sites, temporary workspaces, etc.), if applicable.
- Surveyed Crown land (District Lot Numbers, sections, etc., including theoretically surveyed Crown land posted, but not titled).
- Unsurveyed Crown land.
- Private land should indicate the owner name, parcel identifier number (PID no.), title number and the areas of disturbance.
- Cut blocks, range tenures, guide outfitter areas, Indian reserves, coal tenures and all other areas of special interest.
- Agricultural Land Reserve (ALR), if applicable.
- Construction corridor(s), if applicable.

2) Title Block information:

- Applicant company name.
- Applicant file number.
- BCGS mapsheet.
- Legal description of the project.
- Date plan prepared (yyyy/mm/dd).
- Scale.
- Revision number.
- Survey company name, address and phone number.
- Sheet numbers (e.g., sheet 1 of 2).
- Survey company job number.
- Survey company drawing number.
- Table of crossings.
- Crossing number.
- Drawing number.
- Approved by and checked by name.
- Project manager.
- Notes.
- Revision information (number, completed by and date of revision).

3) Scale bar placed above the title block where it will not interfere with the drafted areas.

4) Area block to summarize the following in the legend:

- Total area of Crown and private land.
- Total area within MOT rights-of-way.
5.7 | Maps and Plans Tab

- Total area of new Crown land disturbance minus any woodlot and MOT rights-of-way areas included in the project area and/or minus any previously cleared areas (where stumpage has already been collected).

- Area of existing Crown land disturbed.

5) Plan diagram to indicate:

- Dimensions and area of Crown land (including any associated oil and gas activity sites).

- Dimensions and area of linear segments, if applicable.

- Location of Agricultural Land Reserve (ALR), if applicable.

- Woodlot area clearly marked.

- Surveyed Crown land (district lot numbers, sections, etc., including theoretically surveyed Crown land posted, but not titled) and unsurveyed Crown land should be labelled on the plan.

- Private land should indicate the owner name, parcel identifier number (PID#), title number and the areas of disturbance broken down into OGAA activity area, associated oil and gas activity area, etc. within each parcel.

- Cut blocks, range tenures, guide outfitter areas, Indian reserves, coal tenures and all other areas of special interest should be indicated and labelled on plan.

- NTS coordinates (units, block, group); chainages; deflections; crossing numbers, if any, to correspond to the table of crossings; vegetation changes (brush/tree types) and a North arrow.

- ABA enhanced management and regulatory policy areas for all ABA values.

- Construction corridor(s).

6) Plan diagram to indicate and classify waterbodies within 100 metres of a proposed oil and gas activity or Crown land application (i.e. campsite, storage site, borrow pit, etc.).

7) Construction corridor and within the corridor, the oil and gas activity (e.g. pipeline or well), deck sites, workspaces, brush pushouts, or any other associated oil and gas activities required must be indicated on the construction plan and listed in the plan legend. The construction corridor should be indicated on the construction plan, using dashed lines and mark.
“Construction Corridor”. The area table on the construction plan should reference the total area (in hectares) encompassed by the construction corridor; this area will be reflected in the spatial data within the total application areas. The construction review corridor should include the proposed location of future activities where applicable. E.g. The location of a future pipeline within the wellsite construction corridor area.

8) Stream crossings are required for all stream and waterbody crossings required to carry out oil and gas activity and identified in the application (Section 11 of the Water Sustainability Act). The crossing number must match the crossing identified in the construction plan. UTM Coordinates (NAD 83 CSRS) must be identified and the name of the stream or waterbody. The crossing number, UTM coordinates and the name of the stream or waterbody must also be identified in the Crossing Table.

Additional Construction Plan Requirements: Facilities

Construction plans for facility applications must include all roads, right-of-ways, public utilities, easements, road allowances and places of public concourse located within 60 metres of storage tanks and production equipment, and/or within 80 metres of flare stacks and incinerators. The plan must also show drainages and the proximity to the lease, adjacent surface improvements and surveyed polygons of facilities.

Additional Construction Plan Requirements: Pipelines

Applicants may use a previously assessed construction corridor shown on a wellsite construction plan. The well authorization number and the Commission file number must appear on the pipeline construction plan and should be identified as a wellsite construction corridor. This should match the information provided with the application.

Construction plans must indicate the constructed and unconstructed road allowance within the body of the plan and ensure the area table has road allowances separated from the pipeline right-of-way and/or associated oil and gas activity areas. The construction plan area table must clearly indicate the new cut and existing area for road allowances.
Indicate the total hectares of (total area of Crown or private land) what is included on the construction plan, including the right-of-way and any workspaces, pushouts, deck sites, shoofly’s, etc.

Indicate pipeline coordinates in NAD 83 UTM CSRS, for example:

- Station 0 + 000 Northing & Easting.
- Station 1 + 123 Northing & Easting.
- Lateral from Station 0 + 035 Northing & Easting.
- Lateral to Station 0 + 456 Northing & Easting.

**Additional Construction Plan Requirements: Roads**

Construction plans should include a detailed table of road segments. Road segments must not include more than one land type. For example, a road including a portion on Crown land, a portion within a road allowance and a portion on private land would include three segments, with to and from locations starting at the intersection of the land types. Road segment tables should include:

- Segment land type status (e.g. Crown land, private land, road allowance, woodlot tenure).
- Segment legal description: from and to locations.
- Segment NAD 83 UTM coordinates northing / easting: from and to locations.
- Segment length.
- Maximum segment width.
- Segment area (hectares), broken down by new or existing disturbance.

**Additional Construction Plan Requirements: Amendments**

- Revised construction plans should include a detailed table of amended areas.
- Within body of the revised plan, highlight the amended areas and include a text box with a description of areas amended.
Additional Construction Plan Requirements: Wells

An associated oil and gas activity permit for investigative use, water source well testing may authorize the holder to drill water source well holes for the purpose of proving a water source. Where water source wells are being applied for, the location must be clearly indicated on the construction plan submitted with the application. Once a water source well has been proven, a well permit and associated Water Sustainability Act authorization must be acquired before the well can be put into production.

If horizontally drilled wells are selected on the application, both the heel and the bottom-hole location must be provided on the construction plan. If a sump is being applied for with the application, it must also be shown on the construction plan.

Additional Construction Plan Requirements: Woodlot Areas

Clearly mark woodlot areas on the construction plan if application includes a woodlot area. On the construction plan and within application, woodlot areas should be:

- Excluded from the area of new cut on Crown land entered on the forestry tab (which is used to calculate the cutting permit area).

Mapping Requirements Specific to Geophysical Programs

In addition to the mapping requirements for all projects, proposed geophysical projects require the following mapping:

1) 1:50,000 Maps:

- 2D project maps require UTM (NAD 83 CSRS) or latitude and longitude coordinates at the start and end of each line.
- 3D project maps require UTM (NAD 83 CSRS) or latitude and longitude coordinates at the corners of the project area.
5.7.4 Emergency Planning Zone Mapping Requirements

The Emergency Planning Zone (EPZ) map must show details about public facilities and residences (seasonal or otherwise) within the EPZ and the Emergency Awareness Zone, and should match the boundary of the emergency awareness zone. The map must show:

- The EPZ (default to the greater of either drilling radius or completion radius for wells).
- The Emergency Awareness Zone (twice the EPZ radius).
- Public or private facilities such as schools, churches, community halls, hospitals, campgrounds.
- Residences and urban centers within the zones.
- Location of trap lines or other tenures (guide outfitter areas, grazing leases, etc.
- Well, facility and/or pipeline location.
- Trails, roads, numbered and named highways, railroads, airports, rivers and lakes.

- Forestry cutblocks (colour coded to status) and any other overlapping tenure.
- Mechanical creek crossings.
- Approximate number of push outs to be constructed; total to be confirmed on the final plan.
- If heli-assisted operations are proposed, amount and size of helipads must be indicated on the legend; total to be confirmed on final plan.
- Include staging areas and campsites (if required for less than 100 days).

2) 1:250,000 Access Map (this can be inset into the above map or on a separate map):

- Access to the project highlighted in yellow.
- Project outline.
- Trapper boundaries and numbers.
5.7.5 Maps and Plans: Data Field Completion

Table 5-G below provides detailed instructions for each of the data fields requiring input (not auto populated) within the Application Management System.

Table 5-G: Application Instruction Table for the Maps and Plans

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Plan Attached</td>
<td>Refer to Section 5.7.3 of this Oil and Gas Activity Application Manual for mapping requirements.</td>
</tr>
<tr>
<td>Survey Company</td>
<td>Select the name of the Survey Company that completed the construction plan.</td>
</tr>
<tr>
<td>Job Number</td>
<td>Enter the job number associated with the uploaded construction plan.</td>
</tr>
<tr>
<td>Sheet Number</td>
<td>Enter the sheet number(s) that correspond with the plan submitted.</td>
</tr>
<tr>
<td>Original Plan Date</td>
<td>Select the original plan date associated with the uploaded construction plan.</td>
</tr>
<tr>
<td>Revised Plan Date</td>
<td>Select the last revision date associated with the uploaded construction plan.</td>
</tr>
<tr>
<td>Revision Number</td>
<td>Enter the last revision number associated with the uploaded construction plan.</td>
</tr>
<tr>
<td>Upload 1:20,000 BCGS Map</td>
<td>Refer to Section 5.7.1 of this Oil and Gas Activity Application Manual for mapping requirements.</td>
</tr>
<tr>
<td>Label</td>
<td>Instructions</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Upload 1:250,000 BCGS Map</td>
<td>Refer to Section 5.7.1 of this Oil and Gas Activity Application Manual for mapping requirements.</td>
</tr>
<tr>
<td>Diversion Map Attached</td>
<td>Upload a Diversion map illustrating in detail the location and extent of the proposed short-term water use.</td>
</tr>
</tbody>
</table>
5.8 Application Attachment Information Tab

Attachments uploaded within the Application Management System support activity applications and are required depending on the oil and gas and associated activity selected and the technical and engineering information provided. This section provides detailed instructions of requirements for uploading attachments.

Each activity and application information section in this manual provides specific instructions for attachment requirements. The Attachment tab in AMS allows applicants to view all attachments uploaded within the activity tabs. It is organized by activity and applicants are able to see what was uploaded for each section and what is still required. Applicants may view attachments and/or upload new attachments using this tab while the application is still in the creation stage.

If applicants are uploading additional attachments from within the Attachments tab, the correct attachment type is required. If attachments fit within the pre-defined list of attachment types, but the applicant selects and attaches as ‘other’, review delays can be expected.

In some cases, attachments must follow specific formats. For example consultation and notification line lists must use the line list spreadsheet template. Unless otherwise indicated, the Commission recommends either Word, Excel, jpg or pdf format. File sizes are limited to 10mb.
6. Requirements for Engagement/Completing Application Information Details

Application information, including engagement activities, supports the activity application and is required for all oil and gas and associated activity applications. This chapter provides detailed instructions of the Commission’s requirements for completing both the engagement requirements and the application information details in the Application Management System.

Consultation and engagement with land owners, rights holders and First Nations are application information tabs, like the previous chapter, but due to the specifics and importance of the pre-planning requirements for these three areas, they are detailed in this Chapter.

Each section of this chapter provides an overview of application information section, definitions and requirements to support the activity listed below. Application information detail requirements (and corresponding section number) in this chapter includes:

- 6.1 Consultation and notification
- 6.2 Rights holder engagement
- 6.3 First Nations

Application Information specific tabs are visible once a new (or amendment) application is created. Data fields are turned on or off based on the activity chosen and the technical and engineering provided in the activity detail section of the Application Management System. The validation functionality assists in ensuring all components of the application are completed. The requirements for the activity tabs are detailed in Chapter 4 of this manual.

Activity-specific tabs are only activated once a new (or amendment) application is created and is based on the activity (or activities) chosen when creating a new application. In addition, AMS is designed to pull geographic location and coordinates from the spatial data uploaded during the application creation stage.
which triggers activity and land information. A globe symbol references pre-populated spatial data linked directly to the spatial files uploaded.
6.1 Consultation and Notification

Consultation and Notification (C&N) is required as part of the application process and is intended to promote communication and collaborative engagement between proponents, land owners and rights holders prior to application submission. Applicants are encouraged to adopt industry’s best practices and assist in the avoidance or mitigation of any potentially adverse impacts.

Submission of an application for an oil and gas or associated activity must include additional application deliverables specific to consultation and notification. The required consultation and notification vary based on the planned activity and location of activity.

The consultation and notification tab requires specific application information details. This section includes an overview of consultation and notification, guidance regarding consultation and notification, details related to consultation and notification requirements and detailed instructions for completing the data fields within the consultation and notification tab.

Details of applicant’s responsibilities to comply with OGAA and all regulations, including the Consultation and Notification Regulation (CNR), are discussed in Chapter 1 of this manual. In addition to the requirements listed in this section, Commission staff may request additional information where necessary to facilitate review of the application.
Please Note:

This manual is written as a whole and provided to industry in sections to allow permit holders to access activity chapters. It is prudent of the permit holder to review the manual in its entirety and be aware of the content in other sections of the manual.

Regulatory Requirements

The Oil and Gas Activities Act (OGAA) and the Consultation and Notification Regulation (CNR) require oil and gas applicants to conduct formal consultation and/or notification with recipients prior to submitting an application for an activity. Refer to the definition of an “applicant” and persons prescribed in Section 3 of the CNR to determine whether consultation and notification is required as part of the application.

Additional Guidance

The Commission’s Land Owner Guide is a resource guide specific to land owners and provides further information from the land owner and recipient point of view on the related processes. It is also an information source and reference guide for recipients of an Invitation to Consult or notification concerning oil and gas activity.

A description of collaboration between rights holders is provided in the BC Government’s A Practical Guide to Effective Coordination of Resource Tenures. The Oil and Gas Trapper’s Notification and Compensation Program is a useful tool for industry and trappers and sets out guidelines for reasonable compensation for both parties.

6.1.1 Consultation and Notification Overview

The consultation and notification processes are similar since both provide a formalized engagement; however, the difference in obligation between the two generally arises from proximity to proposed oil and gas activities. Consultation recipients are typically closer and as such, the consultation process provides the opportunity for discussion between the applicant and the recipient. The steps in the consultation and notification process are outlined in Figure 6-A below.
Consultation

Consultation is the exchange of information regarding proposed oil and gas activities between applicants and recipients within the consultation distance. It begins when a recipient receives an Invitation to Consult from an applicant.

Notification

Notification provides written information regarding proposed oil and gas activities to recipients within the identified notification distance. Where consultation is conducted with recipients, notification is not required.

Please Note:

Notification requirements specific to fixing the site of a pipeline are indicated in Section 23 (3) of OGAA and Section 15 of the Consultation and Notification Regulation (CNR) and detailed in Section 4.2 of the pipeline section of this manual.
Who Must Provide Consultation or Notification?

Any person or company intending to submit an application to the Commission that meets the definition of an applicant in the Consultation and Notification Regulation (CNR), including those prescribed in Section 3 of the CNR, must carry out the prescribed consultation or provide the prescribed notices, according to the CNR prior to submission of the application.

The CNR does not apply to stand-alone related activities as defined under OGAA. Specific information regarding rights holder engagement for related activities on Crown land (associated oil and gas activities) is reflected in Section 6.2 of this manual.

Where an application includes a primary activity and a related authorization, consultation and notification must be done for the entire development, not just the primary activity. The material provided in the invitation to consult and/or notice documents must include all proposed activities, not just the primary activity.

Please Note:

If an applicant offers C&N, by choice or inadvertently, the prescribed process must be followed.

Please Note:

Notification to directly impacted land owners is required even where an activity is excluded from the CNR. The applicant must provide notification to the land owner on whose land the activity is proposed under Section 22 (2) of OGAA (for initial applications) or Section 31 (1) of OGAA (for amendment applications). In specific circumstances, outlined in Section 31 (1.1) of OGAA, exemptions from land owner notification can be granted. Refer to Section 6.1.12 of this manual for information regarding exemptions from consultation and notification requirements.
6.1.2 Land Owners and Rights Holders

Land Owners

A land owner is:

- a person registered in the land title office as the owner of the land surface or as its purchaser under an agreement for sale; or
- a person to whom a disposition of exclusive use (lease, rental of property, or outright sale) of Crown land has been issued under the Land Act.

A land owner is not the Government, or a person who holds a Licence of Occupation for non-intensive occupation and use of Crown land.

Rights Holder

A rights holder is a person granted non-intensive occupation, use of or other rights over Crown land by permit, licence, or approval. Further information specific to rights holders is detailed in Section 6.2 of this manual.

If any level of government holds a tenure such that it would qualify as a rights holder, the respective agency would be consulted, not as government, but as a rights holder. Tenures that qualify entities as rights holders include:

- Licence under Section 39 of the Land Act.
- A community forest agreement, forest licence, timber sale licence, or tree farm or woodlot licence under the Forest Act.
- A forestry licence to cut under the Forest Act, if the licence is a major licence.
- A grazing permit or grazing licence under the Range Act.
- A mineral claim under the Mineral Tenure Act.
- A water licence under the Water Sustainability Act.
6.1 | Consultation and Notification

Please Note:

Provincial and Federal government agencies are not considered rights holders under OGAA. Applicants are not obligated to engage agencies in advance of an application to the Commission; however, applicants are encouraged to advise the Commission of any Land Act Map Reserves or Resource Features (as defined in the EPMR) as early as possible, even prior to submitting an application to the Commission, to allow the Commission to consider and facilitate any required engagement with other government agencies and avoid delays in application processing.

Representation Agreements

In some cases, recipients may designate an individual or agency to communicate on their behalf in the consultation and notification process. The Commission needs to be satisfied that the legal recipient of consultation/notification, as documented in Section 4 of the CNR, has designated someone else to communicate on their behalf in the process. Letters designating representation need to be addressed to the Commission, signed by the official recipient, name the designate, and may also give direction on the parameters of the representation (e.g. only for this application, only for this time period, for all matters related to OGAA).

Letters must be provided for each application – the Commission will not keep a record of representation for use on different files.

For Power of Attorney the Commission requires a copy of the legal document as there are specific parameters on documents, such as restrictions and timelines.

6.1.3 Determining Obligations to Consult or Notify

Obligations to carry out consultation or notification are prescribed in the CNR, and are based on proximity to the proposed activities and other factors, such as presence on an area subject to the right of a rights holder, or the presence of a residence or structure within the consultation or notification zone.

The tables on the following pages outline a series of tests to determine a potential applicant’s obligations to notify or consult. Table 6-A is intended to highlight the different factors which create obligations to notify or consult among the various persons and entities identified in the Consultation and Notification Regulation.
Figures 6-B through 6-E illustrates examples of the application of the consultation and notification tests.

### Table 6-A: Notification or Consultation

<table>
<thead>
<tr>
<th>Person / Entity</th>
<th>Test for Obligation to Provide Notification</th>
<th>Test for Obligation to Provide an Invitation to Consult</th>
<th>Exclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land owner</td>
<td>(i)(A) Unless obligated to consult, if an existing building or structure owned by the local authority is within applicable notification distance.</td>
<td>(ii) If an existing building or structure owned by the local authority is within applicable consultation distance.</td>
<td>Consultation not applicable to geophysical activities, as there is no prescribed consultation distance for geophysical activities.</td>
</tr>
<tr>
<td></td>
<td>(i)(B) Unless obligated to consult, if an area identified in Official Community Plan is within applicable notification distance.</td>
<td>(i)(B) an area identified in Official Community Plan is within applicable consultation distance.</td>
<td>None.</td>
</tr>
<tr>
<td></td>
<td>(i)(C) If a known community watershed is within applicable notification distance.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Authority</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 (1) (b)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government of Canada</td>
<td>i) Unless obligated to consult, if an existing building or structure owned by the government of Canada is within applicable notification distance.</td>
<td>ii) An existing building or structure owned by the government of Canada is within applicable consultation distance.</td>
<td>Consultation not applicable to geophysical activities, as there is no prescribed consultation distance for geophysical activities.</td>
</tr>
<tr>
<td>4 (1) (c)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 6-A: Notification or Consultation

<table>
<thead>
<tr>
<th>Person / Entity</th>
<th>Test for Obligation to Provide Notification</th>
<th>Test for Obligation to Provide an Invitation to Consult</th>
<th>Exclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Nations 4 (1) (d)</td>
<td>i) Unless obligated to consult, if all or a portion of the First Nation's Indian reserve is located within the applicable notification distance.</td>
<td>ii) Any portion of the First Nation's Indian reserve is located within the applicable consultation distance.</td>
<td>Consultation not applicable to geophysical activities, as there is no prescribed consultation distance for geophysical activities.</td>
</tr>
<tr>
<td>Person, other than land owner in Section (a) who is registered owner of land surface or as its purchaser under an agreement for sale 4 (1) (e)</td>
<td>(i) Unless obligated to consult, if all or a portion of the land is located within the applicable notification distance.</td>
<td>ii) Any portion of a residence the person occupies or a structure the person uses to shelter livestock is located within the applicable consultation distance. iii) The person is a school board and a school or related structure is within the applicable consultation distance.</td>
<td>Consultation not applicable to geophysical activities, as there is no prescribed consultation distance for geophysical activities.</td>
</tr>
<tr>
<td>Person who has entered into agreement with land owner to lease or rent a residence or a structure used for livestock on the land 4 (1) (f)</td>
<td></td>
<td>ii) Any portion of a residence or structure for which the person has entered into an agreement with land owner is within the applicable consultation distance.</td>
<td>Consultation not applicable to geophysical activities, as there is no prescribed consultation distance for geophysical activities.</td>
</tr>
</tbody>
</table>
### Table 6-A: Notification or Consultation

<table>
<thead>
<tr>
<th>Person / Entity</th>
<th>Test for Obligation to Provide Notification</th>
<th>Test for Obligation to Provide an Invitation to Consult</th>
<th>Exclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rights Holders  4 (1) (g)</td>
<td>(i) Unless obligated to consult, if the proposed activities are to be carried out on an area subject to a right of the rights holder.</td>
<td>ii) If the proposed activities are to be carried out on an area subject to a right of the rights holder, and it is known to the applicant the ability of the rights holder to exercise their right will be directly and adversely affected by the proposed activities.</td>
<td>None</td>
</tr>
<tr>
<td>Ministry of Transportation and Infrastructure 4 (3)</td>
<td></td>
<td>A pipeline proposed within municipality within the right-of-way of a highway, and is to be used for transporting petroleum, natural gas or both.</td>
<td>Only applicable to pipelines.</td>
</tr>
<tr>
<td>Municipal Council 4 (3) and (4)</td>
<td></td>
<td>(3) Unless Subsection 4 applies, a pipeline proposed within a municipality and within the right-of-way of a highway. (4) If the proposed activities for a pipeline to permit including permission construct and operate a pressure regulating station on land owned by the applicant within the municipality.</td>
<td>Only applicable to pipelines.</td>
</tr>
</tbody>
</table>
Please Note:

Tree Farm Licence and Forest Licence holders require an Invitation to Consult if the proposed activities are to be carried out on an area subject to a right of one of these licence holders. Thus, the Invitation to Consult is only required if the proposed activity intersects an area where the licence holder holds a cutting permit and the cutting permit area has not been harvested.

Figure 6-B Consultation and Notification Test

<table>
<thead>
<tr>
<th>Linear Proposals 1 (Pipelines, Oil and Gas Roads and Geophysical Exploration in relation to Private Land parcels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NE 1/4 (Notification to Landowner, as no residence or structure present) S.4(1)(e)(i), (Geophysical only)</td>
</tr>
<tr>
<td>NW 1/4 (Notification to Landowner, as residence is within C&amp;N Distance S.4(1)(e)(ii) (Oil &amp; Gas Roads &amp; Pipelines)</td>
</tr>
<tr>
<td>NE 1/4 (Notification to Landowner) S.4(1)(e)(i) Applicable to all activities &amp; (Invitation to Consult to agreement holder) S.4(1)(f) (Not applicable to Geophysical)</td>
</tr>
<tr>
<td>SE 1/4 (Invitation to Consult to Landowner S.4(1)(a) (Activity proposed on landowners land)</td>
</tr>
<tr>
<td>SW 1/4 (Invitation to Consult to Landowner S.4(1)(a) (Activity proposed on landowners land)</td>
</tr>
<tr>
<td>SE 1/4 (Invitation to Consult to Landowner, as activity proposed on landowners land) S.4(1)(a) &amp; (Invitation to Consult to agreement holder) S.4(1)(e)(iii)</td>
</tr>
</tbody>
</table>

C&N Distance
Linear Oil & Gas Proposal
Rented Residence or Structure
Residence or Structure
6.1 Consultation and Notification

Figure 6-C Consultation and Notification Test

Linear Proposals 2 (Pipelines, Oil and Gas Roads and Geophysical Exploration)
- Community Forest Agreement Holder
  S.4(1)(g)(i) or (ii) Applicable to all applications
- Woodlot Licence Holder
- Notification to First Nations
  S.4(1)(d)(ii) Applicable to Geophysical & Invitation to Consult to First Nations
  S.4(1)(d)(ii) Applicable to O&G Roads and Pipelines
- C&N Distance

Figure 6-D Consultation and Notification Test

- NE 1/4 Excluded from C&N
- NW 1/4 Notification to Landowner, S.4(1)(e)(ii), as the residence or structure is outside the consultation distance
- NE 1/4 Notification to Landowner, S.4(1)(e)(ii) & Invitation to Consult to agreement holder, S.4(1)(f), as residence or structure is within consultation distance
- SE 1/4 Excluded from C&N
- SW 1/4 Notification to Landowner, S.4(1)(e)(ii), as the residence or structure is outside the consultation distance
- SE 1/4 Invitation to Consult to Landowner S.4(1)(a), as activity is located on the landowner's land

C&N distances do not apply to Rights holders, therefore the WL holder is excluded from C&N

Consultation Distance
Notification Distance
WA
Rented Residence or Structure
Residence or Structure
6.1.4 Calculating Consultation and Notification Distances

Minimum distances have been set for consultation and notification associated with specific activities in the CNR, sections 6 through 10. Distances are measured horizontally from:

- Centre point of a facility area (if no well is located on, or proposed to be located on, the same cleared area as the facility).
- Centre point of a wellsite (if one or more wells or facilities are located on or proposed to be located on the wellsite, consultation and notification distances reflect the centre of the well pad).
- Centre of the right-of-way of a pipeline, oil and gas road, or centre line of a seismic line.

For each category of activity, there is a minimum distance where notification or consultation is required, as outlined in Table 6-B and illustrated in Figures 6-G and 6-H.
Where an application includes a construction corridor and the applicant wants the flexibility to move the activity footprint anywhere within the corridor, consultation and notification distances must be measured from the outer edge of the corridor.

Where an application includes both a primary activity and a related authorization, consultation and notification must be done for the entire development, not just the primary activity. The material provided in the invitation to consult and/or notice documents must include reference to all activities, not just the primary activity.

Table 6-B below makes reference to distances in the Consultation and Notification Regulation.

**Table 6-B: Consultation and Notification Distances for Oil and Gas Activity**

<table>
<thead>
<tr>
<th>Oil and Gas Activity</th>
<th>Consultation Distance</th>
<th>Notification Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processing plant, compressor station or pump station.</td>
<td>3,300 metres</td>
<td>3,300 metres</td>
</tr>
<tr>
<td>Facility with an area less than 5 hectares.</td>
<td>1,000 metres</td>
<td>1,500 metres</td>
</tr>
<tr>
<td>Facility with area equal to or more than 5 hectares. One facility only.</td>
<td>1,300 metres</td>
<td>1,800 metres</td>
</tr>
<tr>
<td>Facility with area equal to or more than 5 hectares in size. More than 1 facility.</td>
<td>1,300 metres</td>
<td>1,800 metres</td>
</tr>
<tr>
<td>Wellsite less than 5 hectares*. Fewer than 9 wells.</td>
<td>1,000 metres</td>
<td>1,500 metres</td>
</tr>
<tr>
<td>Wellsite greater than or equal to 5 hectares. Nine or more wells.</td>
<td>1,300 metres</td>
<td>1,800 metres</td>
</tr>
<tr>
<td>Pipeline</td>
<td>200 metres</td>
<td>200 metres</td>
</tr>
<tr>
<td>Road Construction</td>
<td>200 metres.</td>
<td>200 metres.</td>
</tr>
<tr>
<td>Geophysical</td>
<td></td>
<td>400 metres.</td>
</tr>
</tbody>
</table>
*If an applicant has an existing permit for eight wells, and an additional application is made for a ninth well as a separate application, the ninth well must use the consulting or notification distance for nine or more wells (either 1,300 or 1,800m).

**Figure 6-G: Illustration of Consultation and Notification Distances Surrounding a Well or Facility.**
6.1.5 Information For the Recipient

Documentation Requirements

Notification

Notification packages to recipient(s) must include the information listed in Section 11 of the CNR.

The prescribed descriptions in Section 11 (c) to (f) must also include:

- Location of proposed activities (Section 11(c)). All legal locations potentially impacted by the contemplated activities must be noted, including cases where a project may be carried out on an area covering more than one legal location, but owned by the same land owner.

- Associated development (Section 11(d)(i)). All proposed oil and gas and related activities associated with the proposed development, including any significant structures and equipment to be added (constructed or used) to carry out the subject activity.
6.1 | Consultation and Notification

- **Order of activities (Section 11(f)).** For multi-activity permits, including multi-well pads, describe the entire anticipated schedule of activities over various years, where applicable.

**Please Note:**

Consultation and Notification maps must be at an appropriate scale to show clearly the activities in relation to dwellings, facilities and nearby urban centers.

**Consultation**

An invitation to consult must include the content outlined in Section 13 of the CNR.

The prescribed descriptions in Section 13 (c) to (g) must also include:

- **Location of proposed activities (Section 13(c)).** All legal locations potentially impacted by the contemplated activities must be noted, including cases where a project may be carried out on an area covering more than one legal location, but owned by the same land owner.

- **Associated development (Section 13(d)(i)).** All proposed oil and gas and related activities associated with the proposed development, including any significant structures and equipment to be added (constructed or used) to carry out the subject activity.

- **Order of activities (Section 13(e)).** For multi-activity permits, including multi-well pads, describe the entire anticipated schedule of activities over various years, where applicable.

**6.1.6 Consultation and Notification Timelines**

Applicants must carry out the prescribed consultations and notification while budgeting for appropriate timelines and taking into consideration delivery methods. Applicants must provide recipients a 21-day review and response period. All documentation must follow the methods of service set out in Section 79(1) of OGAA.

Figure 6-1 shows graphically the timeline for service period and response period to determine consultation and notification timelines.
Figure 6-I Using service period and response period to determine consultation and notification timelines

### Determining C&N Timelines – Service Period and Response Period

<table>
<thead>
<tr>
<th>Methods of Service</th>
<th>Service Period</th>
<th>C&amp;N Recipient Response Period</th>
<th>Application Submission</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAIL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notice Mailed</td>
<td>1st – 5th days of service period</td>
<td>1st - 21st day of recipient response period</td>
<td>Earliest date an application may be submitted</td>
</tr>
<tr>
<td>Calendar day 0</td>
<td>Calendar day 1-5</td>
<td>Calendar day 6 - 26</td>
<td>Calendar day 27</td>
</tr>
<tr>
<td><strong>EMAIL, FAXED, POSTED, LEFT IN BOX</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notice Sent/Transmitted/Posted/Left</td>
<td>1st - 3rd days of service period</td>
<td>1st - 21st day of recipient response period</td>
<td>Earliest date an application may be submitted</td>
</tr>
<tr>
<td>Calendar day 0</td>
<td>Calendar day 1-3</td>
<td>Calendar day 4 - 24</td>
<td>Calendar day 25</td>
</tr>
<tr>
<td><strong>DELIVERED IN PERSON BY AGENT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notice Delivered &amp; Deemed Received</td>
<td>1st - 21st day of recipient response period</td>
<td>1st - 21st day of recipient response period</td>
<td>Earliest date an application may be submitted</td>
</tr>
<tr>
<td>Calendar day 0</td>
<td>Calendar day 1 - 21</td>
<td>Calendar day 22</td>
<td>Calendar day 22</td>
</tr>
</tbody>
</table>

**NOTE:** Where the last day of the recipient review period falls on a statutory holiday, the review period will be extended to the next day that is not a statutory holiday.
Consultation and Notification Activity Complete

The obligation to notify or consult is fulfilled as prescribed in Section 12(3) and 14(3) of CNR, respectively. An application can be submitted following:

- Twenty-one days after the last required notification or consultation was deemed received, if no written responses are received, no objections are raised, or all reply/meeting obligations per Section 12(3)(d) and 14(3)(d) of CNR are fulfilled, as applicable;

- The date when the applicant receives written responses from every person notified indicating that they do not object to the proposed application, if less than 21 days after the last required notification or consultation was deemed received;

- The date, beyond 21 days after the last required notification or consultation was deemed received, when the applicant has sent the last written reply; or the day after the date when the applicant has conducted the last meeting (or made reasonable efforts to arrange a meeting with the recipient), if applicable. This pertains to applications where the applicant has received a written response to which Section 11(g)(i)(A) or (B), or 13(h)(i)(A) or (B) of the CNR applies.

If a written response is received following the prescribed response period, the applicant has no obligation under CNR to provide a written reply or schedule a meeting. However, the Commission recommends that applicants make best efforts to address and resolve concerns with affected land owners and rights holders. The Commission will consider any written submission made respecting an application.

Letters of Non-objection

A letter that signifies non-objection, per s. 11 (g)(i)(A) or 13(h)(i) of the CNR enables the proponent to apply to the Commission earlier than the 21 days past receipt by recipients, if they have received this from all parties who are in the engagement plan. Letters of non-objection do not require a reply by regulation.

It is not a “non-objection” if there are additional comments that note concerns or things the recipient would like the applicant to do; those are considered written responses and, if such correspondence is received by the applicant within the 21 day engagement window, a written reply is required.
Please Note:

Non-objection is not the same thing as a waiver allowing construction to commence prior to the 15 day waiting period outlined in OGAA Section 25(6).

Major Changes

If there is a major schedule change for oil and gas activities, or the permit holder decides not to carry forward a planned oil and gas activity, all recipients should be notified of the change.

6.1.7 Replying to Recipients

Recipients of consultation or notification with interests in or concerns about a proposed oil and gas activity may provide a written response to the applicant or the applicant’s designated contact.

Recipient written responses may detail concerns and any proposed recommendations for mitigation. If the response is received within the 21 day consultation and notification period the applicant must reply, in writing, as soon as possible. The obligation to consult, and thus the ability for the applicant to submit the application, is not met until the last written reply has been sent.

Where a written response to consultation includes a request for a meeting, the applicant must make reasonable efforts to meet with the recipient in a timely manner and provide a summary of the meeting to the Commission with the application. The obligation to consult, and thus the ability for the applicant to submit this application, is not met until the day following the date of the meeting. If reasonable efforts have been made to schedule the meeting and the 21 day period has elapsed without the meeting being scheduled, the application may be submitted along with a detailed explanation of the efforts made to schedule a meeting.

Recipient concerns, proposed recommendations for mitigation and meeting requests are tracked. Applicants should consult the CNR to ensure all prescribed statements are correct and included. The applicant must make a written reply to the recipient if the recipient makes a written response within the 21 day period. The applicant’s response must contain all of the relevant provisions outlined in Section 12(2) or 14(2) of CNR, as applicable.
The Commission provides the required Line List Template for applicants to use for all correspondence records. The completed Line List along with recipient written responses and replies must be included in the application submission as part of the written report (detailed in Section 6.1.10 of this manual).

### 6.1.8 Written Submissions to Commission

In addition to the consultation and notification processes, Section 22 (5) of OGAA conveys the right for anyone with an interest or concern about a proposed activity and/or its proposed location to make a written submission. While not required, a Written Submission Form is recommended and available on the Commission’s website or directly from the Commission.

Written submissions are made directly to the Commission, can happen at any time in the application process, and may be made by any person. This differs from recipient requirements and written responses which are specific to consultation and notification and have clear guidelines and timelines. The Commission forwards written submissions to applicants, along with a Case File Number. Where received prior to application submission, the Case File Number must be referenced on the Line List. The applicant is not required to reply, however may be encouraged to respond in order to assist in resolution of issues. Completed Written Submission Forms are sent by email to:

OGC.WrittenSubmissions@bcogc.ca, or submitted directly to the Commission’s Fort St. John or Dawson Creek offices.

### Unresolved Concerns

To ensure decisions are made with full knowledge it is important that any concerns that are unresolved at the time of application, including those outside the Commission’s regulatory jurisdiction (e.g. access and compensation), are noted as unresolved concerns in the C&N Line List. It is also important to note if concerns were raised and responded to verbally; these should also be included in the C&N Line List for the application.
Case File Numbers

Case file numbers must be referenced in applications whenever Written Submissions are received or where there are unresolved concerns with respect to proposed activities. Applicants should contact the Community Relations department well in advance of submitting an application to obtain case file numbers, when required. Case file numbers will be provided to the applicant upon receipt of the following information:

- a copy of the notification and the map sent to the recipient;
- the written responses and replies exchanged during the C&N timeline; and
- the name, contact information, and recipient type for those with unresolved concerns.

If there is no documentation identifying unresolved concerns and mitigating actions, a brief summary noting verbal exchanges is required.

One case file number will be assigned per land owner or rights holder, per application. It is important to note that case file numbers are not interchangeable or reusable. If a case file number has been provided to the applicant and is not used (e.g. if issues are resolved prior to submitting the application), please advise Community Relations and the case file number will be canceled.

6.1.9 Dispute Facilitation & Conflict Resolution

Conflicts not resolved before submitting an application affect the Commission’s review process and may determine whether an application is approved with changes, without changes or refused.

The applicant and recipient(s) may require facilitation services within the Commission if, after all reasonable efforts are made, issues remain unresolved. This non-mandatory process exists to aid communication and resolve interest-based differences between applicants and consultation and notification recipients.

This facilitation ranges from prompting the exchange of additional information to providing neutral mediation between parties. An assessment of the processes
and activities completed and the specific circumstances will determine the type of facilitation service most effective. Landowner Liaisons within the Commission’s Community Relations Department are available to assist with dispute facilitation. It is recommended that applicants provide full documentation regarding their efforts to resolve concerns to the Community Relations Department prior to submitting an application. This will assist in a more efficient application review and decision process.

6.1.10 C&N Application Requirements

Written Report

OGAA requires that each permit application subject to consultation and notification requirements include a written report, summarizing the results of consultation and notification activities. This has been incorporated under the Consultation & Notification and Rights Holder Engagement tabs within AMS.

The Commission requires the applicant to upload components of the written report into the AMS during the application process. Specific files, relevant to the written report, to be uploaded include:

- Completed consultation and notification line list template. The line list is a summary record of the consultation and notification activities performed with each recipient. The Line List Template is found on the Commission website and includes an example for guidance. The AMS will not accept line list templates that are altered or missing required information. Table 6-C also provides detailed instructions for each of the data fields in the AMS C&N tab.

- Engagement supporting documentation, which includes:
  1. All notification/consultation information;
  2. Details of any known concerns and mitigating actions taken by the applicant;
  3. Responses received from recipients and replies made by applicant. The package of responses must include any recipient responses to consultation or notification, replies sent from the applicant, attempts made by the applicants to contact recipient. The applicant should make an effort to follow up with recipient if mail is returned, sent to
6.1 | Consultation and Notification

Please Note:

PID numbers must be included in the line list under the “Recipient Legal Land / Parcel description of Rights Holder Tenure Identifier” tab.

6.1.11 Revisions and Amendments

Revisions

In accordance with Section 5 of the CNR, applications may be revised, whether as a result of the consultation and notification process and associated engagements with recipients or not, and in some circumstances, additional consultations or notifications may be required.

If the revision includes the addition of a new petroleum or natural gas well, facility or pipeline, increase in total project area of one hectare or more, or a shift of the proposed project footprint by 100 metres or more in any direction, the obligation to notify or consult is triggered.

In addition, revisions that result in new recipients falling within the prescribed consultation or notification distances require consultation or notification of the
new recipients and the 21 day response period before applying or resubmitting a revised application to the Commission.

Those affected by a revision that involves the above listed changes who were previously consulted or notified and remain in the C&N radius require revised C&N explaining the revised program.

It is not required that those who were previously consulted or notified and who are no longer in the C&N radius be further engaged; however it is a best practice to notify them explaining that they are no longer potentially affected.

A revision as shown in Figure 6-F, may result in a different applicable consultation distance than the initial proposal. For example:

- Incorporating a facility onto a wellsite.
- Consolidating wellsites to a single wellsite exceeding five hectares.

**Figure 6-F Significant Revision in Consultation Distance**

![Figure 6-F Significant Revision in Consultation Distance](image)
Amendments

Specific requirements for permit amendments are determined on an application-by-application basis by the decision maker. Typically, the decision maker’s consideration of C&N under Section 31(5), will apply only to major amendments where there is the potential for adverse impact to the rights of the rights holder or adjacent land owner. This consideration is primarily centred around quiet enjoyment of the land and will usually focus on amendments that involve changes in activity levels that may increase air (primarily dust), noise or light emissions.

For amendment applications, the applicant must provide notification to the land owner on whose land the activity is proposed under Section 31 (1) of OGAA, except where exempted from doing so under Section 31 (1.1). The notice must provide a description of the proposed amendment. The notice must also advise the recipient that they may send a Written Submission (within 15 days of receiving the notice) to the Commission regarding the amendment. The applicant does not need to wait 15 days after deeming the notice received before submitting the amendment application.

Major Amendments

Major amendments include the following:

1. an increase in area of one hectare or more;
2. a shift in the approved footprint by 100 metres or more;
3. the addition of facility equipment, except that which is specified in the definition of a major amendment in the CNR;
4. the addition of or a change in material conveyed in a pipeline to petroleum, natural gas or both; and
5. the addition of a pipeline segment within a permissioned right of way, but not including a segment split for repair/replace works.

Please Note:

For amendments on private land, the land required for any additional related activities (i.e. associated oil and gas activities) will not be considered when determining whether #1, above, applies; however, it must be referenced on the construction plan.
After an application for a major amendment has been submitted, the Commission may require, under Section 31(5) of OGAA, a permit holder to complete all or a portion of the prescribed requirements outlined in the CNR. If the Commission compels the permit holder to provide consultation/的通知, applicable reviews will continue during the prescribed response period; however, a decision will not be made until that period has elapsed, and it is confirmed that no objections/outstanding concerns have been raised by the affected parties.

Non-Major Amendments
A non-major amendment is considered to be anything other than what is included in the definition of a major amendment in CNR. The CNR definition of an applicant includes only those persons submitting an application for a major amendment where the Commission has made a determination to compel C&N under Section 31(5). Thus, only those persons referenced in Section 31(1) of OGAA must be notified for non-major amendments.

Exemptions Regarding Amendments
Under Section 31(1.1) of OGAA, the Commission may exempt a person or class of persons from the requirement to provide notice under Section 31(1). For directions regarding requesting exemptions, refer to Section 6.1.12 of this manual.

The Commission issued a class of persons exemption under Section 31(1) in March 2016. The exemption can be found [here](#). When submitting an application to which this exemption applies, upload a copy or reference to it under the Consultation & Notification tab in AMS.

6.1.12 Exemptions from C&N Obligations

Upon written request from the applicant, the Commission may exempt an application from consultation and notification requirements specified in Section 22 (3) of OGAA. In doing so, the Commission may also substitute other consultation and notification requirements. The Commission may also exempt an applicant from providing notice to directly impacted land owners, provided certain criteria are met, as per Section 31(1.1) of OGAA.

Requests for exemptions must include:
• a description of the proposed activity;
• a precise explanation of which prescribed requirements the applicant is requesting exemption from;
• the rationale behind the request including and explanation of why it is unreasonable or unachievable to fulfill the prescribed requirements; and
• an explanation of what the applicant proposes to do in lieu of the prescribed requirements, if applicable.

Exemption requests must be submitted to the Commission by e-mail, and can be directed, as appropriate, to the Executive Director, Permit Adjudication; Executive Director, Major Projects, the Vice President, Applications, or the Executive Director, Resource Stewardship and Major Projects. Contact details can be located in the Phone List on the Commission’s website.

If an exemption is granted, the proponent must include the written exemption letter along with any relevant supporting documentation related to the exemption with the application.

Please Note:
The Commission cannot exempt applicants from providing notification to landowners of proposed oil and gas activities, per Section 22(2) of OGAA, but can exempt from the prescribed consultations or notices required under Section 22(3).

Please Note:
Exemption requests should not be confused with variance requests to rights holder engagement timelines, which can be directed to the appropriate Authorizations Manager.
6.1.13 Permit Extensions

Requirements for a Permit Extension

Permit holders should provide a courtesy notification to all stakeholders and/or landowners who were originally notified or consulted of their intent to request an extension. As this is not considered notification under the CNR, it should not include the CNR content of notice requirements. The letter should include an updated schedule of activities and the permit holder’s contact information in the event the recipient has any questions or wants additional information.

With respect to an extension application, the Commission’s decision maker may require that some or all of C&N be carried out prior to making a decision on the application under Section 32(3) of OGAA.

Please Note:

Including the prescribed content of notice requirements constitutes offering C&N. If a permit holder does offer C&N by choice or inadvertently, the prescribed process must be followed.

6.1.14 Consultation & Notification: Data Field Completion

Table 6-C below provides detailed instructions for each of the data fields requiring input (not auto populated) within the Application Management System.
### Table 6-C: Application Instruction Table for the C&N Tab

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultation Radius (m)</td>
<td>Provide the consultation radius associated with the activity. If the application is an amendment, where no consultation or notification has been carried out, leave this field blank.</td>
</tr>
<tr>
<td>Notification Radius (m)</td>
<td>Provide the notification radius associated with the activity. If the application is an amendment, where no consultation or notification has been carried out, leave this field blank.</td>
</tr>
<tr>
<td>Line List Attached</td>
<td>Upload Consultation &amp; Notification line list. The file name formatting should read as: “LineList_Version#_Date”.</td>
</tr>
<tr>
<td>Explain Map Changes</td>
<td>If the revision number of the C&amp;N map does not correspond with the revision number of the map used during engagement, describe the changes and why it was not necessary to re-engage with the new map.</td>
</tr>
<tr>
<td>Exemption from Consultation and Notification Regulation Requested</td>
<td>Indicate if consultation and notification exemption was received prior to submitting the application.</td>
</tr>
<tr>
<td>Written Submission received by persons not engaged</td>
<td>Indicate yes, if written submissions have been received by persons not included on the line list as part of the Consultation and Notification process.</td>
</tr>
<tr>
<td>Case File Number(s)</td>
<td>Provide the Commission case file number(s) associated with any written submissions / unresolved concerns. Contact the Commission’s Community Relations department if you have written submissions or unresolved concerns, but do not have a case file number(s).</td>
</tr>
<tr>
<td>Unresolved Concerns by persons not engaged</td>
<td>Indicate yes, if concerns brought forward by persons not included on the line list as part of the Consultation and Notification process remain unresolved.</td>
</tr>
</tbody>
</table>
6.2 Rights Holder Engagement

Rights holder engagement is required as part of the application process for CER related approvals, single activity associated oil and gas activities on Crown land, and single activity authorizations permitted under the Water Sustainability Act. Submission of an application for any of the above applications must include additional application deliverables specific to rights holder engagement.

The rights holder engagement tab requires specific application information details. This section includes an overview of rights holder engagement, guidance regarding rights holder engagement, details related to rights holder engagement requirements and detailed instructions for completing the data fields within the rights holder engagement tab.

6.2.1 Rights Holder Engagement Process Overview

The province coordinates resource management related to oil and gas activities and is mindful of reducing adverse effects on long-term rights holders’ interests. The methods used to engage rights holders may vary depending on the nature and scope of the proposed related activity. Rights holder engagement is a process to ensure appropriate engagement with rights holders in cases where the consultation and notification process does not apply.
Rights Holder Defined

A rights holder is a person granted non-intensive occupation or use of Crown land by permit, licence or approval indicated as follows:

<table>
<thead>
<tr>
<th>Legislation</th>
<th>Permission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Act</td>
<td>Licence under Section 39&lt;br&gt;Permit under Section 14</td>
</tr>
<tr>
<td>Forest Act</td>
<td>Forest licence&lt;br&gt;Forestry licence to cut (major) – unharvested CP only&lt;br&gt;Community forest agreement&lt;br&gt;Timber sale licence&lt;br&gt;Tree farm licence – unharvested CP only&lt;br&gt;Woodlot licence</td>
</tr>
<tr>
<td>Range Act</td>
<td>Grazing permit&lt;br&gt;Grazing licence</td>
</tr>
<tr>
<td>Wildlife Act</td>
<td>Guide outfitter's licence&lt;br&gt;Guiding territory certificate for Crown land&lt;br&gt;Registered trapline</td>
</tr>
<tr>
<td>Mineral Tenure Act</td>
<td>Mineral claim</td>
</tr>
<tr>
<td>Water Sustainability Act</td>
<td>Water licence&lt;br&gt;Use approval (Short-term water use)&lt;br&gt;Change approval (Changes in and about a stream)</td>
</tr>
</tbody>
</table>

The Commission requires applicants engage rights holders prior to submitting an application. The applicant is expected to notify a rights holder if the proposed activity is within an area subject to the right of a rights holder (e.g., the proposed related activity falls within a guide outfitter’s tenure) or if the proposed activity is deemed to have the potential to adversely affect existing rights (e.g. if the proposed activity could result in impacts to downstream water rights holders).

If proposed activity is within an area subject to the right of a rights holder or as detailed in engagement requirements for Water Sustainability Act applications
below, and it is known to the applicant that the ability of the rights holder to exercise their rights are likely to be directly and adversely affected, the Commission expects the applicant to engage the rights holder in consultation.

Please Note:

If a legal recipient chooses to designate someone to communicate on their behalf, a letter designating the representation must be sent to the Commission. The letter must be addressed to the Commission, state the name of the designate, outline the parameters of the representation, and be signed by the official recipient. Letters must be provided for each application, as the Commission will not keep a record of representation for use on other applications.

Please Note:

For Power of Attorney, a copy of the legal document must be sent to the Commission.

Figure 6-J: Rights Holder Engagement Process

Who must carry out Rights Holder Engagement?

The rights holder engagement process must be carried out by applicants preparing applications for the following activities:

- Associated oil and gas activities not included in consultation and notification processes carried out on an OGAA activity.
- CER pipeline right-of-way applications.
- CER road right-of-way applications
- CER ancillary applications.
- Short-term water use authorizations.
• Changes in and about a stream authorizations.
• Water Licence applications.

In addition, the rights holder engagement process must be carried out in preparing revision or amendment applications if the revision or amendment will change the location of the activity or if the applicant expects the changes may lead to additional adverse impacts on rights holders.

Provincial and federal government agencies are not considered rights holders. Applicants are not obligated to engage agencies prior to submitting an application to the Commission, however, applicants are encouraged to advise the Commission of any provincial or federal interests, such as Land Act Map Reserves or Resource Features (as defined in the EPMR), as early as possible. The Commission will facilitate any required engagement during the application review.

**Please Note:**

If an associated oil and gas activity was included in the Consultation and Notification process carried out under an OGAA application, but is being applied for separately from that OGAA application, further rights holder engagement is not required prior to application for the associated oil and gas activity.

**Please Note:**

Prior to the submission of an application for a camp, applicants are required to notify the Peace River Regional District (PRRD) as a rights holder.

**Rights Holder Engagement Requirements for CER Related Approvals and Associated Oil and Gas Authorizations**

The province makes every effort to ensure that resource management is coordinated and that the related oil and gas activities will not adversely affect long-term rights holders’ interests. The methods used to engage rights holders may vary depending on the nature and scope of the proposed related activity.
Engagement materials provided to the rights holder must provide sufficient information to enable an understanding of the proposed activity and its relationship to the rights holder’s legally granted interests. Generally, relevant information includes:

- Applicant name and contact information.
- Description of the location of proposed activity.
- Activity specifics including any significant structures and equipment to be added.
- Any roads that will be used to carry out the proposed activities.
- Approximate timing schedule of project where applicable.
- Map that shows the proposed activities in relation to rights holder’s area of interest.
- Statement advising the rights holder may make a Written Submission to the Commission and at any time prior to the application decision.
- Recipient response options. Clearly state options for recipients to respond including:
  - Responding directly to applicant.
  - Providing a Written Submission to the Commission.

The Commission requires the applicant to document their completed rights holder engagement process and include with the application submission. Applications for authorizations under the Act must be submitted to the Commission no less than 14 calendar days after all rights holders, and land owners have been deemed to have received notification.

**Methods of Service**

Acceptable methods of service for the distribution of rights holder engagement materials and for standards used in determining when a document is to be deemed received in the rights holder engagement process, refer to Section 6.1.7 of this manual for further information.
Timelines

During engagement with rights holders, applicants must allow 14 calendar days for the rights holder to respond, after the deemed received date, before submitting the application to the Commission. However, applicants may apply earlier if a written response from all impacted rights holders is received, stating there are no objections. If a written response is received within the prescribed engagement period, the applicant is required to submit the response including the applicant's written reply with the application.

Please Note:

A written response letter that signifies non-objection enables the applicant to apply to the Commission earlier than the 14 days past receipt by the recipients. However, if the letter contains additional comments or concerns, it does not qualify as a letter of non-objection.

Best Practices

If there is a major schedule change for an activity, or if the permit holder decides not to carry forward with the planned activity, all recipients should be notified of the change.

Rights Holder Engagement Requirements for Water Sustainability Act Authorizations

For the purposes of authorizations granted under the Water Sustainability (Short-Term Water Use (use approval), Changes in and about a stream (change approval), Water Licences), water rights holders as defined in the Water Sustainability Act are those water rights holders whose water rights may be detrimentally affected by the issuance of the authorization under consideration.

Water rights holders include:

- Water licensees.
- Applicants for water licences.
- Use approval holders.
- Use approval applicants.
The Water Sustainability Act also specifies that riparian owners and those land owners whose property may be physically affected by the issuance of the licence or authorization under consideration must also be notified. If access across private property is required the applicant must have land owner consent. On Crown land currently under treaty, riparian owners are generally expected to include those First Nations in whose traditional territory the proposed water withdrawals are to occur.

First Nations deemed as riparian owners will be engaged as per the Commission’s First Nations consultation process and therefore do not require notification during rights holder engagement.

A search of the Water Licenses Web Query, along with the North East Water Tool (NEWT), the Omineca Water Tool (OWT), or the North West Water Tool (NWWT) should be completed before submitting a Short-Term Water Use Application, to assist with determining water rights holders on the same water source.

Applicants must notify and engage with rights holders, riparian owners and land owners as defined in the Water Sustainability Act, and provide a summary of that engagement with their application. For change approval applications, verification of the landowners consent is required and must be included with the application.

Rights holders, riparian owners and land owners must be notified according to the requirements outlined in Section 117 of the Water Sustainability Act which specifies the ways in which a notice may be given or delivered. Section 117 also specifies when a notice may be deemed received depending on which delivery method has been utilized.

Notification materials provided to rights holders, riparian owners and land owners must include:

- The name of the decision maker (BC Oil and Gas Commission).
- The applicant name and contact information.
- A map indicating the POD location/s and/or the proposed works in relation to the rights holders, riparian owners or land owner’s area of interest.
- A description of the proposed timing and extent of works.
- A statement advising the rights holder, riparian owner or land owner that they may object to the proposed water withdrawals via Written Submission to the Commission within 30 days of receiving the notice.
- The BC Oil and Gas Commission’s Fort St. John mailing address to which objections can be sent.

Notification material must include sufficient information to enable an understanding of the proposed water withdrawals to be made and their relationship to the rights holders, riparian owners, or land owner’s legally granted interests.

**Methods of Service**

Acceptable methods of service for the distribution of rights holder engagement materials and for standards used in determining when a document is to be deemed received in the rights holder engagement process, refer to Section 117 of the Water Sustainability Act for further information.

**Rights Holder Engagement Requirements for all Applications**

The Commission requires that the applicant document their completed rights holder engagement process and include with the application:

- The Rights Holder Engagement Line List.
- One example of a notification letter sent and any correspondence received from those rights holders, riparian owners and landowners who have been notified.
- A description of all mutually acceptable agreements made including copies of all Letters of Non-Objection received. Letters of Non-Objection must be signed by the rights holder, riparian owner or land owner.
6.2 Rights Holder Engagement

- Details of any known rights holder, riparian owner or land owner concerns and a description of any actions taken or measures applied by the applicant in response to these concerns.
- A map which includes the location of all POD or proposed works and the location of all rights holders, riparian owners and land owners notified.

Applications for authorizations under the Water Sustainability Act must be submitted to the Commission no less than 14 calendar days after all rights holders, riparian owners, and land owners have been deemed to have received notification as per Section 117 of the Water Sustainability Act.

Once the application is received the decision maker will determine if he or she is satisfied with the Rights Holder Engagement undertaken by the proponent.

The Water Sustainability Act gives the decision maker discretion to determine if further Rights Holder Engagement is required as well as if a decision can be rendered before the 30 day waiting period has expired. The Commission encourages companies and the affected rights holder(s) to try to resolve concerns before contacting the Commission.

**Best Practices**

If there is a major schedule change for an activity, or if the permit holder decides not to carry forward with the planned activity, all recipients should be notified of the change.

**Case File Numbers**

Case file numbers must be provided on applications whenever there are Written Submissions received or where there are unresolved concerns with respect to proposed activities. The Commission’s Community Relations department is able to provide case file numbers upon receipt of information including the following:

- Copy of notification and map sent to recipient.
- Written responses and replies exchanged during the engagement timeline.
• Name, contact information and recipient type for those with unresolved concerns.

• If no documentation identifying unresolved concerns and mitigative actions, a brief summary noting verbal exchanges.

Please Note:

Case file numbers are assigned for the designated person/activity are not interchangeable or reusable. If a case file number has been provided to you and you no longer require it (e.g. if issues are resolved prior to application) please advise the Community Relations department so the Commission can cancel the case file number.

6.2.2 Written Submissions to Commission

In order for the Commission to make informed decisions it is necessary to understand interests or concerns of those who may be directly impacted by a proposed activity. The Commission has adopted by policy the opportunity to submit a Written Submission for those wishing to convey interests/concerns. The Written Submission Form available on the Commission’s website.

Written submissions are made directly to the Commission and can happen at any time in the application process and may be made by any person.

The Commission forwards written submissions to applicants. The applicant is not required to reply, however may be encouraged to respond in order to assist in resolution of issues. Completed Written Submission Forms are sent by email to OGC.WrittenSubmissions@bcogc.ca, or submitted directly to the Commission’s Fort St. John or Dawson Creek offices. Written submissions are reviewed by the Commission’s statutory decision maker prior to making a statutory decision on the associated permit application.
6.2.3 Replying to Recipients

Rights holders with interests in or concerns about a company’s proposed oil and gas activity may submit a written response to the applicant or the applicant’s designated contact.

Recipient responses may detail concerns and any proposed recommendations for mitigation. If the response is received within the 14 day engagement period, the applicant is strongly encouraged to reply, in writing, as soon as possible. When part of the rights holder engagement process, this response is not mandatory but is a valuable opportunity to provide information to the rights holder and demonstrates a desire to address concerns.

Recipient concerns, proposed recommendations for mitigation and meeting requests must be tracked by the applicant. The Commission provides the required Rights Holder Engagement Line List Template for applicants to use to track all correspondence records. The completed Line List along with recipient written responses and replies must be included in the application submission.

6.2.4 Unresolved Concerns

Conflicts not resolved before submitting an application affect the Commission’s review process and may determine whether an application is approved with changes, without changes or refused.

If there are unresolved concerns, the applicant is required to include details of the concerns and the proposed mitigation actions with the application submission. The Commission uses the rights holder engagement documentation for evaluation and may:

- Make a decision on the application, based on the engagement documentation.
- Recommend the applicant continue consultation.
- Recommend the use of dispute resolution.
Please Note:

To ensure decisions are made with full knowledge, it is important that all concerns that are unresolved at the time of application, including those outside of the Commission's regulatory jurisdiction, are noted as unresolved concerns. It is also important to note if there are any concerns that were raised and responded to verbally.

6.2.5 Dispute Facilitation & Conflict Resolution

The applicant and recipient(s) after all reasonable efforts are made, may require facilitation services within the Commission if issues remain unresolved. This non-mandatory process exists to aid communication and resolve interest-based differences between applicants and consultation and notification recipients.

This facilitation may be as simple as prompting the exchange of additional information to providing neutral mediation between parties. An assessment of the processes and activities completed and the specific circumstances will determine the type of facilitation service most effective. Landowner Liaisons within the Commission's Community Relations Department are available to assist with dispute facilitation.

6.2.6 Variance Requests

Where the rights holder engagement process described in this manual is not practicable for a specific application, applicants may request permission to use alternate engagement practices or strategies. Variance requests must be made to the appropriate Authorizations Manager prior to application. Written approval of alternate engagement practices or strategies must be included with the application.
6.2.7 Completing the Rights Holder Engagement Tab

Applicants should follow the instructions, answer questions and enter data in the Application Management System. Applicants are required to upload the following items onto the rights holder engagement tab:

- Rights holder engagement line list. The line list is a summary record of the consultation and notification activities performed with each recipient. The Line List Template is found on the Commission website and includes an example for guidance. Table 6-D also provides detailed instructions for each of the data fields of the Line List.

- Engagement map showing the proposed activities in relation to rights holders’ areas of interest. The map must cross reference rights holder engagement recipients from the Line List.

- All written responses from recipients and replies from the applicant. It is recommended that the package of responses and replies include a sample copy of the Notification and Invitation to Consult letters sent to recipients.

- Letters of non-objection (if applicable).

- Written Report. In order to make well informed decisions the Commission requires each permit application subject to rights holder engagement requirements to submit a written report to the Commission, summarizing the results of consultation and notification activities. This has been incorporated under the Consultation & Notification and the Rights Holder Engagement tabs within AMS. In addition to the line list, the written report consists of:
  1. Consultation and notification map.
  2. All written responses from recipients and replies from the applicant.
6.2.8 Rights Holder: Data Field Completion

Table 6-D below provides detailed instructions for each of the data fields requiring input (not auto populated) within the Application Management System.

### Table 6-D: Application Instruction Table for the Rights Holder Tab

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the application require a variance from engagement?</td>
<td>Indicate if variance from rights holder engagement was received. If yes, attach Commission approval of the request.</td>
</tr>
<tr>
<td>Package of Replies and Responses Attached: (Optional)</td>
<td>Indicate yes to include any written replies and responses between the recipient and proponent.</td>
</tr>
<tr>
<td>Letters of Non-objection indicator</td>
<td>Was a letter of non-objection received from the rights holder (Y/N)?</td>
</tr>
<tr>
<td>Written Submission received by persons not engaged</td>
<td>Indicate yes, if written submissions have been received by persons not included on the line list as part of the Consultation and Notification process.</td>
</tr>
<tr>
<td>Case File(s) (Written Submissions)</td>
<td>Provide the Commission case file number associated with written submissions received (if applicable).</td>
</tr>
<tr>
<td>Unresolved Concerns by persons not engaged</td>
<td>Indicate yes, if concerns brought forward by persons not included on the line list as part of the Consultation and Notification process remain unresolved.</td>
</tr>
<tr>
<td>Case File Number(s) (Unresolved Concerns)</td>
<td>Provide the Commission case file number(s) associated with unresolved concerns. Contact the Commission's Community Relations department if you do not have a case file number(s).</td>
</tr>
</tbody>
</table>
6.3 First Nations

As an agent of the Crown, the Commission fulfils any provincial obligation to consult with First Nations on any potential impacts to their rights recognized and affirmed by Section 35(1) of the Constitution Act, 1982.

Submission of an application for an oil and gas or associated activity may require additional application requirements in regards to First Nations and is based on the planned activity and location of activity. The First Nations tab requires application information details.

This section includes an overview of First Nations consultation, guidance regarding First Nations consultation, details related to First Nations consultation requirements and detailed instructions for completing the data fields within the First Nations consultation tab.

In addition to the requirements listed in this section, Commission staff may request additional information where necessary to facilitate review of the application.

6.3.1 Consultation Procedures and Timelines

Administration Boundaries

Administrative boundaries established through consultation agreements guide where consultation for each First Nations community takes place. Where there is no agreement in place, applicants should refer to the Consultative Areas Database. Depending on the community to be engaged, the consultation process, and the application, requirements may be different.
Notice Only Communities

There are four Aboriginal communities the Commission provides information about oil and gas activities through an Aboriginal Community Notice:

- Kelly Lake Cree Nation (KLCN).
- Kelly Lake First Nation (KLFN).
- Kelly Lake Metis Settlement Society (KLMSS).
- Acho Dene Koe (Fort Liard First Nation) (FLFN).

The Application Management System identifies communities to be consulted based on spatial data uploaded. No additional information or attachments are required.

Treaty 8 First Nations

Consultation process agreements are established between the Commission and some Treaty 8 First Nations. Where agreements are in place with a Treaty 8 First Nations community, the consultation process is guided by the agreement. The Application Management System spatial data identifies Treaty 8 First Nations to be consulted.

Where agreements with Treaty 8 communities are not in place, the consultation process is guided by the Interim Consultation Procedure (ICP) with Treaty 8 First Nations. All existing agreements with First Nations and the ICP are found on the First Nations page of the Commission’s website.

Please Note:

Effective immediately, INDB 2018-15 New Measures Applied to Oil and Gas Applications is no longer in effect and has been replaced by INDB 2019-13. Operators should now use the Blueberry River First Nations Application Assessment Form on the Commission’s website, instead of the Regional Strategic Environmental Assessment (RSEA) Interim Measures Form which is no longer an application requirement.
Non-Treaty 8 Nations

For non-Treaty 8 First Nations, the Commission follows internal procedures based on provincial guidelines and recent court decisions regarding consultation procedures. Where applications require consultation with non-Treaty 8 communities, spatial data identifies non-Treaty 8 nations to be consulted.

Consultation Agreements

The Commission works closely with First Nations to establish negotiated Agreements and Memoranda of Understanding as living documents, recognizing that both documents are the foundations for long, collaborative working relationships. The established formal consultation processes provide for First Nations’ participation in the consultation process and ensures applications are dealt with as effectively and efficiently as possible.

An application, amendment or a revision to an oil and gas activity which may have a potential adverse impact to the Nation’s Section 35(1) rights is classified in accordance with the applicable consultation process agreement.

Applicants must determine the classification according to the consultation process agreement and refer to the First Nations section of the Commission website for the appropriate agreement.

Timelines

General consultation timelines are provided in consultation process agreements and indicate the amount of time a First Nations community is given to review and respond.

Best practice dictates that applicants engage with First Nations early and often and to refer to the consultation process agreements as a guide to the consultation procedures and timelines.

Where concerns are identified by the First Nation, there may be additional time required to complete the consultation process. The Commission will discuss
those concerns and potential solutions with the First Nation. In some cases, this may include facilitating meetings between the First Nation and applicant to discuss concerns and proposed accommodation measures.

**Additional Reference Documents for First Nation Consultation**

Additional reference documents regarding the First Nation consultation process and the applicant's role are available on the Commission's website. Applicants may also refer to the Ministry of Aboriginal Relations and Reconciliation's *Building Relationships with First Nations: Respecting Rights and Doing Good Business*, and the Environmental Assessment Office's *Proponents Guide to First Nation Consultation in the Environmental Assessment Process*.

The Commission may make available additional information to First Nations to assist with the engagement process and to assist First Nations with decisions.

### 6.3.2 Engaging First Nations Prior to Application

In order to facilitate the efficiency of consultation, applicants are encouraged to initiate and build relationships with First Nations communities by discussing proposed activities with the communities during the project planning phase.

Applicants may contact the Commission’s First Nations Liaison Officers (FNLOs) to access First Nations area maps and for advice about engaging First Nations.

Where pre-engagement occurs, an Engagement Log should be used to record all engagements and related details including concerns expressed by a First Nation and mitigation proposed or implemented by the applicant. If required, an engagement log can be uploaded within the First Nations tab. Engagement logs may be considered in the decision making process, however the engagements do not replace the First Nations consultations carried out by the Commission as described above.
6.3.3 First Nations: Data Field Completion

Table 6-E below provides detailed instructions for each of the data fields requiring input (not auto populated) within the Application Management System.

**Table 6-E: Application Instruction Table for the First Nations Tab**

<table>
<thead>
<tr>
<th>Label</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Nations Details</strong></td>
<td></td>
</tr>
<tr>
<td>Has an Authorizations Manager</td>
<td>This question will be asked of the applicant when the application is on private land outside of Treaty 8 areas. If answered ‘no,’ the applicant will be required to upload a confirmation from an Authorizations Manager (e.g. an email), indicating First Nations consultation is not required for the application.</td>
</tr>
<tr>
<td>Deemed Consultation Required</td>
<td></td>
</tr>
<tr>
<td><strong>Treaty 8 First Nations</strong></td>
<td></td>
</tr>
<tr>
<td>Consultation Category</td>
<td>Select the consultation category (classification) based on the pertinent consultation agreement or process.</td>
</tr>
<tr>
<td>Criteria Reference</td>
<td>Select the classification criteria from the appropriate consultation agreement or process used to determine the consultation category indicated.</td>
</tr>
<tr>
<td>Description</td>
<td>Provide a rationale indicating why the indicated criteria and category is appropriate. Include any pertinent supporting information.</td>
</tr>
<tr>
<td>File XREF Number</td>
<td>Enter any other Commission file numbers or the Crown land tenure number to which the proposed activity is related.</td>
</tr>
<tr>
<td>Upload Attachment</td>
<td>Attachments may include First Nations engagement log and cover letter, where required.</td>
</tr>
<tr>
<td><strong>Non Treaty 8 First Nations</strong></td>
<td></td>
</tr>
<tr>
<td>Consultation Category</td>
<td>Indicate the consultation category (classification) based on the pertinent consultation agreement or process.</td>
</tr>
<tr>
<td>Label</td>
<td>Instructions</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Criteria Reference</td>
<td>Select the classification criteria from the appropriate consultation agreement or process used to determine the consultation category indicated.</td>
</tr>
<tr>
<td>Description</td>
<td>Provide a rationale indicating why the indicated criteria and category is appropriate. Include any pertinent supporting information.</td>
</tr>
<tr>
<td>File XREF Number</td>
<td>Enter any other Commission file numbers or the Crown land tenure number to which the proposed activity is related.</td>
</tr>
<tr>
<td>Attachments</td>
<td>Attachments may include First Nations Engagement Log and cover letter where required.</td>
</tr>
</tbody>
</table>
7. Canadian Energy Regulator Reviewable Projects

The Canadian Energy Regulator (CER) (formerly, the National Energy Board (NEB)) reviews and makes determinations on applications for federally regulated pipeline projects. In determining whether a pipeline project should proceed, the CER reviews, among other things, its economic, technical and financial feasibility, and the environmental and socio-economic impact of the project. The CER conducts audits and inspections of federally regulated pipeline construction and operation to ensure that engineering, safety and environmental requirements are met.

The CER and the Commission entered into a Memorandum of Understanding (MOU) to enhance cooperation and coordination between the parties, to outline a mutual aid agreement between the parties in respect of incident investigation and emergency response, and to establish a protocol for coordinating training and technical liaison in areas of common interest between the parties.

CER approvals differ from other authorizations issued by the Commission under specified enactment, as they are related to activities regulated under the federal Canadian Energy Regulator Act rather than the Oil and Gas Activities Act (OGAA). To maintain this distinction, separate application types have been created in the Commission’s Application Management System (AMS) for CER related approvals. The Commission may also conduct inspections of any CER related project on which an approval has been issued by the Commission.

This chapter includes an overview of the Commission’s regulatory authority with respect to CER related projects, guidance requirements, and application specific requirements. For detailed instructions on completing application data fields in AMS, the reader may need to refer to other chapters of this manual.
Please Note:
This chapter is dedicated to CER related applications; however, this manual is written as a whole and available to industry in sections to allow permit holders to access activity chapters. The applicant should review the manual in its entirely and be aware of the content in other sections of the manual.

7.1 Commissions Approval Authorities

In accordance with Section 8 and Section 9 of OGAA, the Commission has limited authorities with respect to federally regulated pipelines and related ancillary activities. These authorities do not include the power to issue an approval for pipelines; however, applications for provincial authorizations including the pipeline right-of-way, road rights-of-way, and ancillaries, including facilities, are submitted to the Commission through AMS.

The Commission has authority to issue specific provincial approvals related to pipelines regulated under the Canadian Energy Regulator Act including:

- Land Act, Sections 11, 38, 39, 40 and 96;
- Forest Act, Sections 47.4 and 117; and
- Water Sustainability Act, Sections 10, 11 and 24.

7.2 Preparing, Planning & Application Requirements

As part of an CER pipeline or ancillary application, every applicant must:

- Prepare and submit construction plan(s) for the project as per Chapters 5.7.2 and 5.7.3 of this manual.
- Prepare additional maps and plans as required, defining the scope of the proposed project. See Chapter 5.7.1 for details.
- Carry out Rights Holder Engagement (RHE) and submit the required RHE Line List in accordance with Chapter 6.2.
- If a pipeline will be constructed over, under, parallel or perpendicular to another pipeline, and the applicant has not obtained agreement about construction from the
owner of the existing pipeline, a detailed description of efforts made to obtain agreement must be included in the RHE Line List.

- The Commission will consider the Environmental Protection and Management Regulation (EPMR), particularly Government’s Environmental Objectives (GEOs), in its review of applications. Applicants should provide a document, such as an environmental management plan, that describes the conformance of their proposed activity with each of the GEOs in the EPMR.
- Complete an Archaeological Information Form (AIF) as described in Chapter 5.5 of this Manual.
- Include a First Nations Project Description Form and Cover Letter(s), found here.
- Where an application is located in northeast BC, the Area-based Analysis (ABA), as described in Chapter 5.6.1 is considered. If the proposed activity is impacting an enhanced management or regulatory policy area, an ABA specific mitigation plan must be attached to the application.
- Upload the relevant Canadian Energy Regulator approval or application document.

7.3 Guidance Requirements

7.3.1 Environmental Protection and Management Regulation

By policy, the Commission applies the tests and principles of the EPMR to applications for provincial authorizations for CER regulated pipeline projects. Refer to the Environmental Protection and Management Guide (EPMG) for more information regarding how the Commission considers the identified values.

If CER related activities cannot be carried out in accordance with the guidance recommendation in this chapter (and other applicable chapters) and the EPMG, then a rationale must be included in the application. The rationale must include specifics of the guidelines not followed, an explanation of why they cannot be followed, as well as outline any planning strategies or operations measures that have been or will be implemented to mitigate impacts on the associated value.
7.3.2 Rights Holder Engagement

The province makes every effort to ensure that resource management is coordinated and that oil and gas activities will not adversely affect long-term rights holders’ interests. Methods used to engage rights holders may vary depending on the nature and scope of the proposed related activity. If the proposed activity is within an area subject to the rights of the rights holder, and the applicant knows the ability of the rights holder to exercise their right will be directly and adversely affected, the Commission expects the applicant to engage the rights holder before submitting an application. Chapter 6.2.1 includes a comprehensive list of rights holders.

Where the RHE process, described in Chapter 6.2 this manual, is not practicable for a specific application, applicants may request permission to use alternate engagement practices or strategies. Variance requests must be made to the appropriate Authorizations Manager prior to application. Written approval of alternate engagement practices or strategies must be included with the application.

7.3.3 Map Reserves and Notations of Interest

Provincial and Federal government agencies are not considered rights holders. Applicants are not obligated to engage agencies in advance of an application to the Commission; however, applicants are encouraged to advise the Commission of any Land Act map reserves, Notations of Interest, or Resource Features (as defined in the EPMR) as early as possible, allowing the Commission to consider and facilitate engagement with other agencies and to avoid delays in application processing.

7.3.4 Archaeology Related Authorizations

To allow the Commission to consider impacts to archaeological resources, applicants are required to complete the Archaeology tab in AMS and submit an AIF as an attachment; however, the Archaeology Branch of the Ministry of Forest Lands, Natural Resource Operations and Rural Development (FLNRORD) oversees archaeological work carried out in accordance with the Heritage Conservation Act (HCA). Please refer to Chapter 5.5.5 of this manual, Table 5-E, for instructions on how to fill out the Archaeology Tab in AMS.
Applicants are responsible for ensuring that the appropriate archaeological assessment work is carried out prior to construction.

Where development activities such as harvesting trees, excavating utility trenches, or other ground-disturbing activities need to be conducted within the boundaries of a recorded archaeological site, a Site Alteration Permit under Section 12 of the HCA is required. The Archaeology Branch issues Site Alteration Permits for CER pipelines and ancillary activities.

### 7.3.5 ALR Disturbance

As CER projects are federal jurisdiction, they are not subject to the Delegation Agreement between the Provincial Agricultural Land Commission (ALC) and the BC Oil and Gas Commission, signed June 2013. However, the ALC expects that all CER projects will reclaim ALR lands to the same agricultural standard as other oil and gas developments on ALR lands. Applicants are required to contact the ALC if a CER activity falls within the ALR.

### 7.3.6 Area-Based Analysis

Where CER related applications are located within northeast BC, the applicant must consider the Commission’s ABA approach. The ABA approach helps to minimize cumulative effects on the landscape, reduce the footprint of activities, and shorten restoration / reclamation timeframes on specific resource values.

Please see Chapter 5.6.1 of this manual for additional information regarding ABA requirements.

### 7.3.7 Engaging First Nations

Before submitting an application of any type to the Commission, companies are encouraged to initiate and build relationships directly with First Nations communities that may be impacted by a proposed activity.
Determining the First Nations to be consulted on each proposed activity is the responsibility of the Commission. However, in order to create application packages and conduct pre-engagement, applicants can obtain information on the First Nations in whose territory their activities are proposed by referring to the Consultative Areas Database (CAD) on GeoBC.

The Commission recommends that companies use an Engagement Log to record all meetings and conversations with First Nations communities. Creation and use of this Engagement Log is not required, but can provide helpful information that may be considered in the Commission’s decision-making process. Applicants may contact the Commission’s First Nations Liaison Officers to confirm the First Nations that the Commission will consult and for advice on engaging First Nations.

These engagements do not replace the First Nations consultation carried out by the Commission.

7.4 Application Processes

Applicants may submit their complete CER pipeline right of way and related ancillary applications to the Commission after having submitted the related pipeline application to the CER; however, the decisions on Commission applications are pending CER approval for the related pipeline (a Certificate of Public Convenience and Necessity).

Once all application documents have been prepared, the pipeline application may be submitted to the Commission through the AMS. Applicants may prepare multiple permit applications at the same time by selecting one or all of the activities of the oil and gas project. Multi-activity applications provide a complete picture of the project and the Commission encourages applicants to consider applying for all activities in a single application. Please see Chapter 3 (Application Management System Submission Process) of this manual for detailed instructions on completing applications.

7.4.1 Pipeline Rights of Way

New CER-reviewable pipeline project applications are submitted to the Commission for approval to occupy and use provincial Crown land under Section 39 of the Land Act. The
Commission does not issue an approval for the pipeline itself. Additional provincial approvals may be required to carry out construction of an CER pipeline, including:

- Occupation of Crown land under Section 39 of the Land Act for related ancillary activities (decking sites, workspaces, shooflies, etc.);
- Cutting permits under Section 47.4 of the Forest Act to harvest Crown timber, and approval under Section 117 for a road use permit to use forest service roads; and
- Approvals under Section 10 of the Water Sustainability Act to divert or use water for oil and gas purposes and Section 11 for changes in and about a stream (e.g., crossings and maintenance activities).

Crown land for a CER pipeline and CER related ancillary activities (camps, workspaces, etc.) are issued a License of Occupation under Section 39 of the Land Act. After post-construction submission and survey requirements are met, the license may be replaced by a Land Act Section 40 Statutory Right-of-way (for pipelines) or modified to match the post construction plan (for ancillaries). A License of Occupation conveys non-exclusive use for the purpose described and is not a registerable interest in the land. Government may authorize overlapping and layering of tenures.

Chapter 4.2 of this manual (Completing Pipeline Activity Details) provides guidance on applying for pipelines in AMS and should be referenced when applying for CER related pipelines; however, there are distinctions between OGAA regulated pipeline and CER related pipeline applications. Notable differences are:

- Due to the Commission’s authorities, AMS will generate a modified version of the Pipeline Details tab for CER related pipelines; and
- Rather than a Consultation and Notification tab, AMS will generate a Rights Holder Engagement tab for CER related pipelines.

Spatial requirements for CER related pipelines applications are in the AMS Spatial Data Submission Standards Manual.
Please Note:

Under the Land Act, the Commission cannot dispose of private land; however, legislation states the Commission must charge an application fee for the pipe. Therefore, the Commission requires spatial data for pipeline segments on both private and Crown land. A pipeline segment must be within a land polygon.

7.4.2 CER Related Roads Rights-of-Way

The Oil and Gas Activities Act (OGAA) and Oil and Gas Road Regulation (OGRR) do not apply to CER-reviewable projects; therefore, any road permit that may be granted to CER pipeline permit holders are issued under Section 39 of the Land Act and apply to Crown land only. For all types of road applications (whether OGAA or CER related), the Commission expects the same information to be provided, and CER related applicants should refer to the Oil and Gas Road Regulation for a clear sense of the standards to which proposed CER related roads should be designed, built, maintained, and decommissioned. CER related roads will be subject to permit conditions similar to provisions found in the OGAA and OGRR.

The Commission does not issue CER related road permits on private land but does approve changes in and about a stream (e.g., stream crossings), under Section 11 of the Water Sustainability Act, associated with roads on private land.

For guidance on completing application fields for road applications in AMS, please see Chapter 4.5.5 (Road Activity Submission: Data Field Completion) of this manual. In addition, the applicant should refer to the AMS Spatial Data Submission Standards Manual for guidance on completing CER related road applications.

7.4.3 New Road Application

A road approval is required for any new road on Crown land to be constructed and operated, for a non-status road to be maintained or modified by a CER pipeline permit holder, or to acquire a road approval for a road currently regulated under another statutory authority (Transfer of Jurisdiction).
Roads can be applied for individually or with a CER pipeline right-of-way or ancillary as part of a multi-activity application. The system generates data input requirements for additional activities specified within the spatial data upload.

Road applications for new roads must include all the applications requirements outlined in Section 7.2 of this chapter.

For existing non-status roads with no major upgrades or new area, RHE does not have to be included in the application. Where existing non-status roads require major upgrades and/or new area, rights holders must be engaged prior to application.

Please Note:
A road permit is required prior to carrying out maintenance activities on non-status roads. Several non-status roads can be included in one road permit application by identifying each road as a separate segment in the application.

7.4.4 Road Amendment Application

A road amendment is required to carry out activities not approved by, or which are alterations to the original approval or to modify an approved road, except modifications allowed under the terms of the approval.

Road amendment applications may require RHE, depending on the nature of the amendment. If the applicant knows the ability of the rights holder to exercise their right will be directly and adversely affected, the Commission expects the applicant to engage the rights holder before submitting an amendment application.

7.4.5 Transfer of Jurisdiction

Applications for a “Transfer of Jurisdiction” of an existing road authorized by the Forests, Lands, Natural Resource Operations & Rural Development (FLNRORD) must be submitted as a new road application. The Commission will not transfer a road issued by FLNRORD to a CER...
pipeline operator but will work with FLNRORD to enable the issuance of a Land Act road approval.

To apply for a CER related road permit on an existing road authorized by FLNRORD, applicants should include the following additional attachments:

- Documentation indicating the current road tenure holders’ willingness to relinquish the road in favour of the CER operator; and
- Confirmation from FLNRORD of willingness to close the road permit upon the Commission’s approval of a Land Act road permit.

### 7.4.6 CER Related Ancillary Activities

This process may be used to obtain access to provincial Crown land for stand-alone requirements, such as those that may arise during planning or maintenance activities, including (but not limited to) investigative use permits, temporary workspaces, and any compressor sites and meter stations (facilities) associated with a CER pipeline and located on Crown land.

Additional approvals that may be required with CER Related Ancillary applications may include Short-Term Water Use, Changes in and about a Stream, and new cut on Crown land.

Please see Chapter 4.6 (Completing Associated Oil and Gas Activity Details) of this manual and the [AMS Spatial Data Submission Standards Manual](#) for guidance on completing stand-alone ancillary applications.

**Please Note:**

The Commission may approve land use to oil and gas operators for the purposes of a camp; however, additional authorizations and permits may be required from other provincial agencies to construct and operate a campsite.
7.4.7 Water Sustainability Act Section 10 Application Process

Applicants must acquire authorization under the Water Sustainability Act to use or divert any Crown water resources, except as otherwise exempted under the Water Sustainability Regulation. The water use approvals process may be used to obtain provincial authorizations for short-term use of water.

Please see Chapter 4.7 (Completing Short-Term Water Use Activity Details) of the manual and the AMS Spatial Data Submission Standards Manual for guidance on completing Short-term Water Use applications.

7.4.8 Water Sustainability Act Section 11 Application Process

Applicants must acquire authorization under the Water Sustainability Act for any works proposed to occur within a stream. The watercourse crossings and works process may be used to obtain provincial authorizations for stand-alone activities, such as those that may arise during planning or maintenance activities.

Please see Chapter 4.8 (Changes in and About a Stream Activity Details) of this manual and the AMS Spatial Data Submission Standards Manual for guidance on completing Changes in and About a Stream applications.

7.4.9 Forest Act Section 47.4 Application Process

The Forest Act – Cutting Permit application can be used in scenarios where an applicant may require a single use (stand-alone) licence to cut on Crown land or within a MoTI right-of-way. If a new cutting permit or a renewal of a cutting permit is required, the application can be made in AMS Application through the Forest Act – Cutting Permit application.
7.4.10 Forest Act Section 117 Application Process

Forest Roads declare as Forest Service Roads (FSR) by the FLNRORD are constructed, modified and generally maintained by forest companies. Section 117 of the Forest Act enables application for a Road Permit (RUP) for industrial use of a FSR that excludes forestry activities. The Commission considers road use applications related to oil and gas activities and renders decisions on RUP applications throughout the province.

Applications for RUP are outside of AMS and must be submitted electronically, via email to RoadUsePermits@bcogc.ca. There are no spatial requirements for RUP applications. Please see Chapter 4.5.4 of this manual for additional information regarding the application process.

7.5 Application Review & Determination

It is in the best interest of an applicant to submit their Commission applications as soon as possible after submitting a CER application. Spatial data is a requirement of Commission applications and this spatial data will inform the Commission’s determination on any applications that may overlap the area planned for a CER pipeline, road and/or related ancillary. If applications are submitted to the Commission prior to the applicant receiving their CER Certificate of Public Convenience and Necessity, the Commission application may be halted until such time that the CER approval is issued.

Please see Chapters 1.2.2 (Application Submission and Review) and 1.2.3 (Application Review) of this manual for details regarding the Commission’s application review processes. The Commission’s technical reviews for CER related applications do not include engineering or agriculture.
8. Reviews and Appeals

In accordance with OGAA, a formal review and appeal process exists to review and revisit decisions made by the Commission. Only an eligible person may submit a formal request for Commission review officers (in the case of a review) or the Oil and Gas Appeal Tribunal (in the case of an appeal) to revisit certain determinations.

Because the appeal process is administered by the Oil and Gas Appeal Tribunal and considered an independent body, the Commission’s guidance does not comment on the procedures or processes of the Oil and Gas Appeal Tribunal.

This chapter provides details of the review request procedures and requirements.

8.1 Review Request

Not all determinations made by the Commission are eligible for review. The Commission’s Review and Appeal Coordinator and the designated review official determines the eligibility of a review request based upon three criteria: the determination, the requestor, and the date in which the request was received by the Commission. As defined within Section 69 of OGAA, a determination is only reviewable if:

- Decision is made by the Commission under Section 25 or 26.
- Declaration is made by the Commission on its own initiative under Section 27.
- Order is made by the Commission under Section 40(f).
- Order is issued by an official or the Commission under Division 2 of Part 5.
- Finding is made by the Commission under Section 62.
- Administrative penalty is imposed by the Commission under Section 63.
- Prescribed decision is made under OGAA:
  a) Section 9 of the OGAA General Regulation prescribes the following decisions as determinations for the purpose of Section 69.
- Transfer of a permit or authorization under Section 29.
- Permit amendment under Section 31(7).

A determination is not reviewable if the decision is already subject to an appeal under Section 72 of OGAA. For more information regarding appeals, see the following section.

**Eligible Review Requester**

Only eligible requesters may submit a determination review request. Part 6 of OGAA defines an eligible person to submit a request as:

- Permit applicant.
- Permit holder or former permit holder.
- Person to whom an order under Section 49(1) has been issued.
- Person with respect to whom the Commission has made a finding of a contravention under Section 62 of OGAA.

The Commission only accepts review requests from the persons listed above. Land owners are not eligible to submit determination review requests, but may submit appeal requests to the Oil and Gas Appeal Tribunal based upon the criteria established within Section 72(2) of OGAA.

**Review Request Timeline and Submission**

A request for a review must be received by the Commission’s Review and Appeal Coordinator within 30 days of receiving either the determination or any written reasons for the determination, whichever is the later.
A request for a review must be submitted in writing to the Commission. The request must identify the grounds on which the review is requested. Upon receipt and verification of eligibility, a review official is assigned to hear the determination review. According to Section 69 of OGAA, the review official is a person who did not make the determination, but who is designated in writing to review the determination.

Review requests are emailed to OGC.DeterminationReviews@bcogc.ca or sent by direct mail to the Commission’s head office at:

BC Oil and Gas Commission
Review and Appeal Coordinator
Physical Address: 6534 Airport Road, Fort St. John, B.C. V1J 4M6
Mailing Address: OGC, Bag 2, Fort St. John, B.C. V1J 2B0
9. Permit Management

Companies are responsible for ensuring all post-approval activities are carried out in accordance with the permit, OGAA, regulations and all applicable laws. Applicants and permit holders must understand the operational guidance and requirements for each activity and reporting requirements throughout the lifecycle of the oil and gas and associated activity.

This chapter discusses in brief, permit amendments, terms and expiry and permit transfers. The Commission provides activity related operational manuals and other forms and guidance documents in the documentation section of the Commission’s website.

9.1 Permit Notification

Following a permit approval, the Commission provides notice to the land owner(s) affected by the oil and gas activity. The notice cites specific details about the location of the approved activity, and the land owners’ right to appeal if applicable.

The permit holder must wait 15 days from the day the permit is issued before commencing any oil and gas activity on private land, unless the land owner has consented to the permit holder in writing that the oil and gas activity may commence. Written consent from a land owner is not provided to the Commission; however the permit holder should retain records for auditing purposes.

The permit holder must submit a notice of construction start to the Commission prior the start of operations. Minimum time requirements for submission of notice of construction start for various activities are outlined in the regulations and permit conditions specific to the activity.
Notices of Road Construction Post-approval

Oil and gas road permit holders must notify the Commission, affected land owners, affected rights holders and First Nations, at least 72 hours, and not more than 30 days, prior to beginning construction. Where construction must be carried out expeditiously to address an environmental or operational emergency, notice of construction start must be provided to the Commission, affected land owners and rights holders as soon as practicable. Oil and Gas Activity Operations Manual provides further information on notices of road construction.

9.2 Permit Term and Expiry

Oil and gas operators are responsible for ensuring they hold a valid permit prior to beginning construction on any oil and gas or associated oil and gas activity.

Section 32 (1) of the Oil and Gas Activities Act states that a permit, and any authorization issued to the permit holder for a related activity of an oil and gas activity authorized by a permit, expire on the day after the prescribed period has elapsed, if the permit holder has not by that day begun an oil and gas activity permitted by the permit. Section 8 of the OGAA General Regulation defines the prescribed period for the purposes of Section 32 (1) of the Act as two years.

The Commission may extend an expiring permit and any associated authorizations by no more than one year and may add additional conditions to the current permit.

If the Commission has not received a Notice of Construction Start (NCS) or processed and approved a permit extension application for a permit prior to its expiration, the permit will be deemed expired. The Commission’s receipt of a Notice of Construction Start for any activity on a permit will prevent expiry for all activities included in the permit. Information on the Commission’s Notice of Construction Start processes is available in Chapter 4 of the Oil and Gas Activity Operations Manual.

Where multiple activities are authorized under one permit, and no NCS has been received, permit extensions are required for each activity. For multi-well pads, permit holders are required to submit individual permit extension applications for each well.
Permit Extension Application Process

In order to extend the prescribed period for a permit, permit holders must submit a completed Permit Extension Application Form to the Commission, along with any associated application deliverables. Permit extension applications must be submitted in digital format to permitextensions@bcogc.ca, no later than 30 days prior to expiry of the permit.

Consultation and Notification for Permit Extension Applications

Section 32 (3) of OGAA states that the Commission may require the permit holder to carry out consultations or notifications with respect to the extension application as indicated in the Consultation and Notification Regulation. Further information on consultation and notification requirements for permit extension applications is available in Chapter 6.1.3 of this manual.

9.3 Permit Amendments

Permit holders must submit an amendment application to add, modify or change any existing oil and gas and associated activity permit. Amendments are also required for corrections of inadvertent data errors. Permit holders must ensure engagement, consultation and notification requirements are met if revisions create alterations to the previous engagement, consultation and/or notification.

Applicants may only apply for one amendment at a time as the approval of an amendment will over-write current data in Commission information systems. An amendment can include requests for multiple changes to an approved permit.

9.4 Permit Surrender and Cancellation

If a permit holder would like to request the cancellation of a permit after approval; the permit holder must submit a letter requesting cancellation of the permit. The cancellation request letter must clearly identify:

- Commission file number.
- Legal description location.
- If surface disturbance has occurred.

A confirmation letter is sent to the permit holder upon cancellation of the permit and related land tenures. For quarries, aggregates / borrow pits and campsites, permit holders must state whether or not the area has been left safe and clean.

Where only a portion of a permitted activity is cancelled, a permit amendment application must be submitted rather than a cancellation request.

### 9.5 Permit Transfer

A permit holder may apply to the Commission to transfer a permit under Section 29 of OGAA. For more information on the permit transfer process and transfer application requirements, refer to the [Permit Operations and Administration Manual](#).
List of Appendices

Appendix A: Technical and Engineering Pipeline Assessment Requirement Clauses per CSA Z662
Appendix B: Detailed Engineering Application Requirements for Gas Plants
Appendix C: Facility Changes Requiring an Amendment
Appendix D: Facility Changes Where No Amendment or NOI is Needed
Appendix E: Worksite Borrow pit / Aggregate Operation Categorization Key
Appendix A: Technical and Engineering Pipeline Assessment Requirement Clauses per CSA Z662

Technical and engineering pipeline details are required for all known design specifications for the pipeline, and the start and end points of the pipeline. The start and end points are not just from lease to lease, but the exact start and end point of the pipeline. Requirements listed here reference Clauses, Tables and Figures in CSA Z662 available at the Canadian Standards Association website.

- Engineering assessment required by CSA Z662.
- Table 4.2: to support the use of a higher value being used for location factor on a gas pipeline.
- Clause 4.3.12.2 for pressure test design of components not listed in Z662-11.
- Clause 4.4.3 to determine spacing for isolating valves, unless spaced according to Table 4.7.
- Clause 5.1.3 for use of materials other than as specified in the standards.
- Clause 5.2.4/5.2.5.1 for use of materials other than Table 5.3.
- Clause 5.6.1 for reuse of materials in a different system than they were removed from.
- Clause 9.1.3 for exclusion of certain corrosion control practices.
- Clause 10.3.1.1 to confirm which sections are suitable for use where conditions which can lead to failure are discovered.
- Clause 10.3.1.2 to determine which portions may be susceptible to failure prior to operating at a higher pressure than the established operating pressure. This may include changes which are below MOP.
- Clause 10.3.7.1 prior to a change in service fluid. This is any change in service fluid.
- Clause 10.3.8 prior to upgrading to a higher MOP.
- Clause 10.3.9.1 prior to pressure testing existing piping to make sure the line will not be adversely affected and that the line can sustain the proposed pressure.
- Clause 10.7.1 where a change in class location occurs to allow for meeting anything other than the higher class location requirements.
- Clause 10.8.1 where an existing pipeline is crossed by a road or railway where not updating the design to accommodate.
- Clause 10.8.3 to confirm that a pipeline can sustain the anticipated surface load for any crossings other than road or rail.
- Clause 10.9.2.4 to return an above ground tank to service following a repair without a hydrostatic test.
- Clause 10.10.1.4 to determine suitable operating pressure where defects may make the pipeline unsuitable for normal operating pressure.
- Clause 10.10.2.1 to use a different maximum length and depth of corrosion limit than specified in Figure 10.1.
- Clause 10.10.2.7 to determine that a corroded area is acceptable which does not meet the criteria of other clauses in 10.10.2.
- Clause 10.10.4.2 to determine dents other than those listed are acceptable.
- Clause 10.10.5 to determine surface cracks to be acceptable.
- Clause 10.10.7 to determine weld defects to be acceptable.
- Clause 10.11.4.3 to support design and installation of repair sleeves.
- Clause 10.12.1.1 to support a temporary repair method (welding or non-welding).
- Clause 10.15.2.1 prior to reactivating a pipe.
- Clause 12.4.1.4 to support designs in gas distribution systems which use a weak link in the event of excessive pullout force.
- Clause 12.4.2.4 to determine the chemical factor for liquid hydrocarbons between 0.5 and 1 for polyethylene piping design pressure calculations.
- Clause 13.1.2.16 to demonstrate adequate corrosion resistance of some types of risers or couplings on composite lines for the life of the pipeline where cathodic protection will not be provided.
- Clause 13.2.2.12 to thermoplastically line previously in service pipes (unless a leak test is run).
- Clause 13.2.8.3 to support continued use of the pipeline following a liner breach on thermoplastically lined pipe.
- Clause 13.3.3.6 to demonstrate adequate corrosion resistance of some types of risers or couplings on Polyethylene lines for the life of the pipeline where cathodic protection will not be provided.
- Clause 16.8.7 for any sour lines where there is a possibility of a change in service fluid composition or operating conditions to determining whether the pipeline is suitable for the new conditions.
- Clause 16.10.3.2 for any gas pipelines being returned to service after an extended period of non-use prior to admission of sour fluids.
- Clause 17.4.7 for above ground installations on composite reinforced steel pipelines to ensure suitability.
- Clause 17.10.3 to determine that a corroded area is acceptable which does not meet the criteria of 10.10.2.
- Clause N.13.1 where inspection, testing, patrol or monitoring indicates conditions or imperfections which might lead to failure or damage incidents with significant consequences. To be performed to N.13.2.2.
Appendix B: Detailed Engineering Application Requirements for Gas Plants

The following checklists highlight details of submissions required to assist in the review of gas plant applications submitted to the Commission. As part of an application for a gas plant, applicants must submit two paper copies of the following materials to the Commission’s Kelowna office, in addition to completing an application in the Application Management System.

Summaries and Descriptions

- Dehydrator Engineering & Operations Sheet (DEOS).
- Description of the plant (i.e. DBM) and the proposed processes, including total processing capacity and design flow rates (inlet, recovered products, fuel gas, emissions).
- A plant material balance at design conditions.
- A gas processing plant proliferation review that includes the rationale for constructing the newly proposed plant after consideration of existing active plants and pipeline infrastructure feeding into active plants within a 50 km radius.
- If acid gas is to be discharged to a subsurface formation, a brief description of that proposal must be supplied along with a copy of the reservoir approval issued by the Commission.
- Summary of site surface run-off water management.
- Summary of inlet separator/slug catcher capacity considerations including maximum slug volume and level controls and shutdowns.
- Summary of prime mover starter systems and associated pump drives, and if natural gas is utilized, confirm that the vented gas is connected to the flare system or is conserved.
- Summary of why pressure relief devices (i.e.: PSV’s) are not connected to the plant flare system, if applicable.
- Description of the provisions for facility security and fire prevention and protection.
- List of hazardous materials that will be stored and a description of the storage method.
- Total kilowatt rating of all compressor prime movers powered with natural gas.
- Total amount of H₂S and CO₂ emissions from all sources at the facility in tonnes per day.
- Description of how the plant has been designed to process gas from in-line testing of wells with potential liquid slugs and CO₂ spikes.
• Summary of plant supervision model including operator response time if not manned 24 hours per day.


• Summary of how light pollution has been identified, considered and mitigated.

• Plant blowdown philosophy and how consideration has been made to ensure that high pressure gas is not trapped in the facility during an emergency.

• Summary of the facility shutdown philosophy.

If the proposal includes a sulphur processing facility, include a written submission that:

• Describes the proposed control measures to limit the release of sulphur dust and entrained gases.

• Describes the proposed method to degasify produced liquid sulphur and to dispose of sulphur compounds and other vapours associated with such processes.

• Describes how sulphur volumes will be measured and reported.

Drawings, Diagrams and Maps

• Plot plan drawing.

• Complete plant piping and instrumentation drawings (P&ID’s).

• Process flow diagram (PFD) of the plant and set of plant PFDs.

• Map(s) showing:
  1. Facility being applied for.
  2. All other existing plants and sulphur handling facilities at the site or in the area (within 50 km).
  3. All occupied dwellings and surface improvements in the area (within 10 km).
  4. All lakes, streams, and other surface bodies of water in the area (within 10 km).
  5. All settlements in the area (within 20 km).
  6. General land use (forested, farming, other) in the area (within 10 km).

• Metering block diagram (i.e.: metering schematic) detailing:
  1. All meters in the plant (production accounting and non-production accounting).
  2. Meter types (i.e. orifice, turbine, ultrasonic, coriolis).
  3. All production accounting meters in the plan on a list or table on the metering schematic. This will typically be a subset of all of the plant meters. This list should be cross referenced to the meters shown on the metering schematic by meter number and/or meter description. Also, types of
measuring devices used to determine levels and/or volumes in tanks or production vessels for
production accounting purposes should be included, (e.g. level gauge, level transmitter, pressure
transmitter inlet piping header to plant inlet separators).

4. All stream (plant and inlet header) block valves and normal operational state (normally open or
normally closed), that can cause a change in fluid flow that will impact the production accounting
model.

5. Fuel gas lines (plant and/or field).

6. Pilot gas and dilution gas streams to plant flare stacks. Include tie in points in the plant.

7. All plant piping that can impact the production accounting model.

8. Fluid injection streams. E.g. water, acid gas.

9. All delivery streams.

10. Flare stacks and incinerator stacks.

- Gathering block diagram (i.e.: gathering system schematic) detailing:

  1. Type of primary well production (oil or gas).

  2. Wellsite locations, indicated by the legal surface location.

  3. Wellsite configuration (three phase separation, two phase separation, wet meter). This may be
typical if all wellsites are the same.

  4. All field meters and types. E.g. orifice meter, turbine, etc.

  5. Types of measuring devices used to determine levels and/or volumes in tanks or production
vessels for production accounting purposes.

  6. All field fuel gas streams and meters. If no meter is installed, indicate how volume is determined
for reporting purposes for a given stream.

  7. Field flare streams. If no meter is installed, indicate how volume is determined for reporting
purposes for a given stream.

  8. All field process equipment. E.g. compressors, separators, tanks, etc.

  9. Gathering system offload streams that permit volumes to deliver to processing that is different
from the plant applied for.

  10. Gathering system onload streams that permit volumes to be received from other reporting
facilities, gas plants or gathering systems.

  11. Return fuel gas streams from a plant, facility or other processing equipment.

  12. Gathering system block valves and piping that may impact the production accounting model.
13. All piping streams block valves and normal operational state (Normally Open or Normally Closed) that can cause a change in fluid flow that will impact the production accounting model.

14. A composite analysis of the inlet gas under normal operating conditions and the maximum H2S content of the raw inlet gas in moles per kilomole.

Plans

- Fracture sand management plan. Include the strategies incorporated to capture and monitor for fracture sand returns and associated erosion from the well to the plant sales.
- Fugitive Emissions Management Plan for the proposed plant.
- Air monitoring plan. This may include passive or real time plant/perimeter detection for H2S and/or SO2, wind speed and direction monitoring.
- Storage tank secondary containment plans (production and non-production storage). Include location of truck loading lines.
- Emergency Response Plan or summary of progress to date, with a timeline for ERP submission.

Flare/incinerator/vent stack data submission. This submission must include:

- Stack height and diameter.
- Predicted normal and maximum emissions of SO2/hr.
- Rate and calculated volume of potential H2S releases.
- Results of gas/vapour dispersion modeling for lit and unlit conditions.
- Maximum expected rates for continuous flaring, and volumes/compositions of flared streams.
- Maximum stream velocity in metres per second at the flare metering point.
- Description of the flare metering configuration proposed to measure both.
- Purge gas within the meter range and accuracy lower limit.
- Blowdown situation, within the upper limit of the manufacturers specifications and required published Commission uncertainties.
- Description of how plant processing will conserve gas volumes by avoiding tie-in to the flare and/or incinerator stack (vapor recovery considerations).
- Description of how plant ESD procedures will limit emissions.
- Description of the flame-out detection system configuration for the flare stack/incinerator equipment, and if it is set up to alarm and/or shutdown process.
- Appropriate isopleths for the various levels of \( \text{H}_2\text{S} \) and \( \text{SO}_2 \).
- Description of the design to prevent flashback of flame back into process (e.g.: positive pressure system, flame arrestor).
- Description of how the facility complies to API Standard 521, if applicable.
Appendix C: Facility Changes Requiring an Amendment

The following lists equipment and examples of facility changes requiring the submission of a facility permit amendment for the addition of temporary or permanent equipment on Crown or private land.

- Amine sweetening package - process gas
- Amine sweetening package - fuel gas
- Bullet - condensate storage
- Bullet - LPG storage
- Capacity - gas/liquids throughput permit increase
- Compressor
- Condensate stabilization unit
- Cooler/heat exchanger
- Debutanizer unit
- Deethanizer unit
- Depropanizer unit
- Dehydrator - glycol (process & fuel gas)
- Dehydrator - molecular sieve
- Flare stack
- Generator - (gas/diesel)
- Permitted H₂S increase
- Incinerator
- Meter equipment related to production accounting
- Pump (used to transport hydrocarbon liquid (oil, LPV or HPV) in a pipeline, pump fresh water, or LACT using pumps)
- Pump jack (gas and electric)
- Process refrigeration unit
- Facility storage (pit or tank)
- Treater – Oil
Appendix D: Facility Changes Where No Amendment or NOI is Needed

The following list includes examples of facility changes that do not require a Notice of Intent or amendment. These changes can be made under the authority of the existing facility permit (if not requiring new land).

- Analyzer
- Blow Case (without compressor)
- Coalescer
- Dehydrator - instrument air
- Field header
- Filter
- Generator - solar/fuel cell
- Generator - thermo electric
- Heater
- Instrument air compressor unit
- Line heater
- Meter - non accounting
- Odourization pot
- Other/miscellaneous - minor
- Piping changes at the facility not impacting measurement or air emissions
- Plunger lift
- Pump (except those referenced in Appendix C)
Appendix E: Aggregate Operation Application Process

MINISTRY OF ENERGY MINES AND PETROLEUM RESOURCES (EMPR) AGGREGATE OPERATION
- To apply applicant submits a Notice of Work Application to EMPR

Note: EMPR jurisdiction/inspection under the Health, Safety and Reclamation code.

OIL and Gas AGGREGATE OPERATION
- To apply an application is submitted through the BCOGC’s Application Management System (AMS)

BCOGC determination can result in one of the following:
- Oil and Gas Aggregate Operation for land use permit issued by BCOGC
- Oil and Gas Aggregate Operation for land use permit plus Mines Act permit issued by BCOGC
- Oil and Gas Aggregate Operation for land use permit issued by BCOGC plus Mines Act permit issued by EMPR
- BCOGC will advise when application is to be submitted to EMPR.

Factors considered by the BCOGC to determine if a Mines Act Application is required:
- Size of proposed pit
- Volume to be removed (Annual & Total)
- Duration/planned time period
- Development of benchesing (depth of planned excavation)
- Phased development plans to expand pit
- Blast, sorting or rock crushing.

1. Will the material be for sale?
2. Is the project ESA reviewable?
3. Will there be production of sand for use in hydraulic fracturing?

Yes (To any of the questions)

No (To all the questions)

Will material be used exclusively for oil and gas activity?

Yes

No

Appendix E: Aggregate Operation Application Process