

Chapter 4.6 Completing Associated Oil and Gas Activity Details

Associated Oil & Gas Activity Tab

4.6

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:

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.

Please Note:

The Oil and Gas Activities Act defines both oil and gas activity and related activities and the Regulator adheres to the definitions. The Regulator'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.

AOGA's are related activities that require an authorization under either the Land Act or under s.138 of the Petroleum and Natural Gas Act where applicants cannot adhere to s.8.3 of the [Crown Land Permission Policy](#). The Regulator does not issue authorizations for associated oil and gas activities on private land.

In accordance with Section 24(3) of OGAA:

- The Regulator 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 some AOGA, such as Investigative Use or Restoration activity, the Regulator 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 Director for more information.

The AMS Restoration Release Guide provides additional information on restoration activity.

Approved AOGA applications receive an authorization which generally expires two (2) years after 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 Regulator, 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
- Restoration
- Site remediation
- Staging area
- Storage area

- Sump
- Water source dugout
- Workspace

The AOGA type is auto-populated into the AMS based on attribute data included within the spatial data upload.

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 Regulator 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 Regulator 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.

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 Regulator.

Guidance Requirements

By policy, the Regulator 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 Regulator 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 rationale 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 Regulator waits for the required application deliverables.

Aggregate / Borrow Pits

The Ministry of Energy and Mines has delegated limited authorities to the Regulator 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 Regulator Authorizations Director.

Please Note:

Oil and Gas Aggregate Operations considered by the Regulator 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 Regulator remains responsible 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 ie. 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 (m3).
- 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

Forests as defined in the Crown Land Operational Policy: Aggregate and Quarry Materials.

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.)
 8. Buildings and other facilities.
 9. Sediment control structures.
 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 (MOF). 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 Regulator, 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.

- Total proposed water storage volume (cubic metres, m³).
- Total proposed "live storage" volume (m³). 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 Regulator'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 m³ 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 m³.

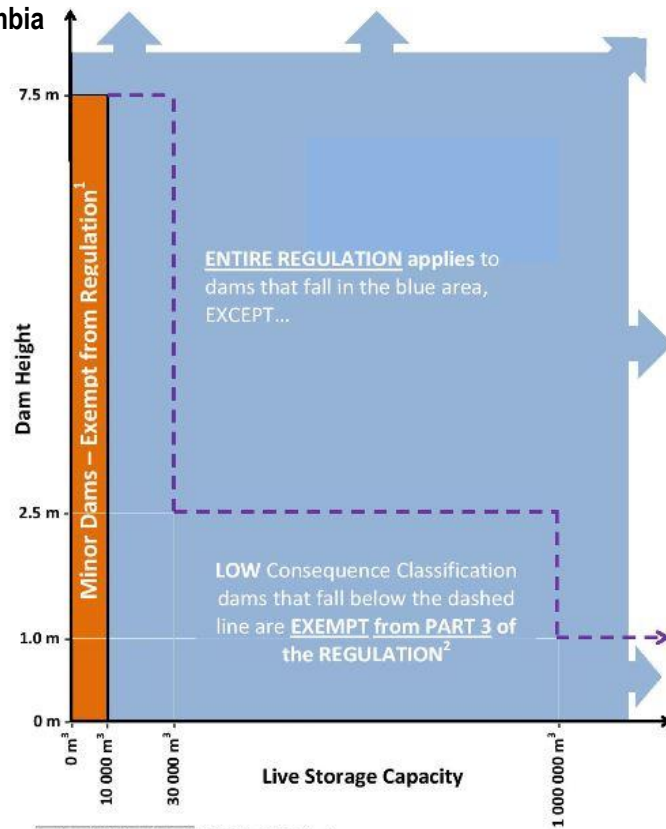
- 2.5 m or more in height, and live storage of >30,000 m³.
- 7.5 m or more in height (regardless of volume).
- The dam has a consequence of failure classification of significant, high, very high or extreme.

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 (MOF) dam safety guidelines. Applicants should refer to the MOF [Dam Safety Program](#) for detailed information.

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

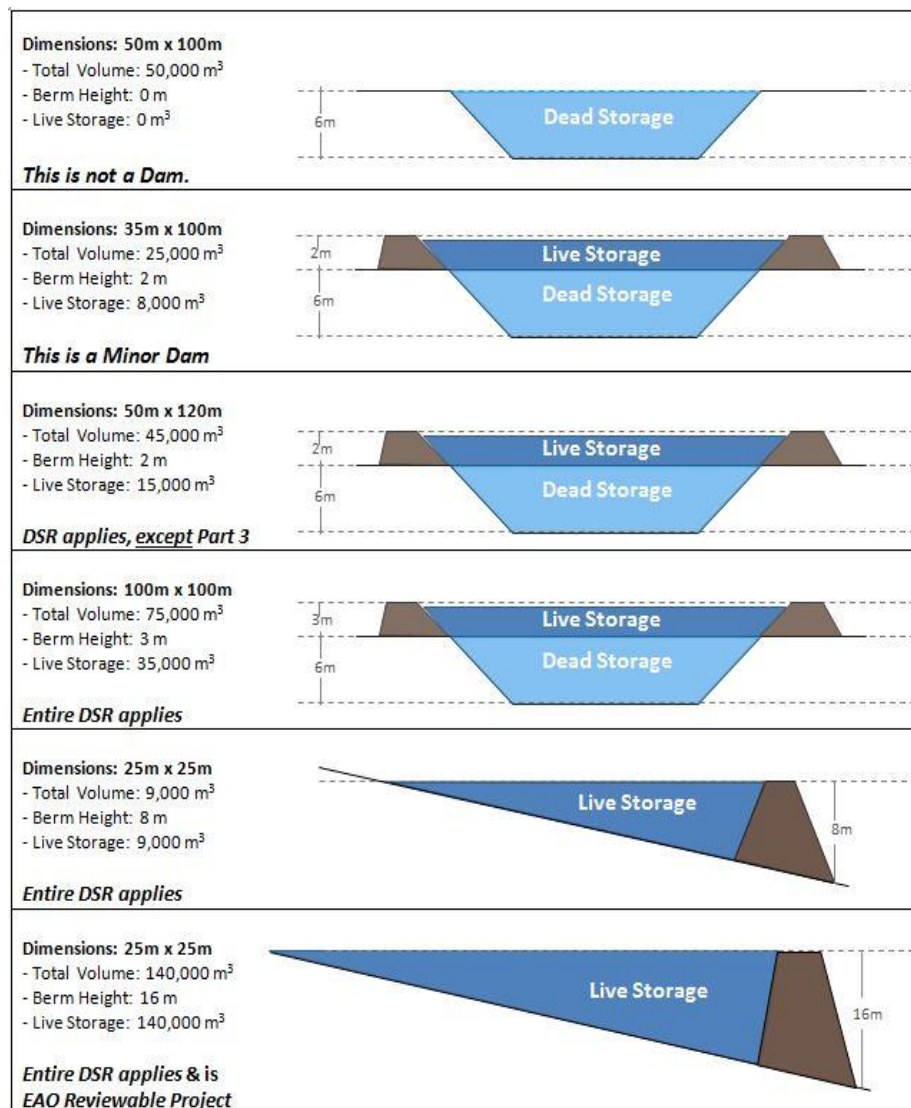
- Follow MOF's requirements specified in the [Plan Submission Requirements for the Construction and Rehabilitation of Dams](#);
- Complete and submit required plans and other information for the proposed dam to:
 - Dams <9 metres in height – MOF Regional Operations (Prince George).
 - Dams ≥9 metres in height – MOF Dam Safety Section (Victoria).
- Obtain "leave to commence construction" from MOF 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



1. Dam Safety Regulation 40/2016, Part 1, Section 2
2. Dam Safety Regulation 40/2016, 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 Regulator 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 Regulator 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 Regulator 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 Regulator 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.

Microseismic Monitoring Site

Applications for microseismic monitoring activity are submitted as an associated oil and gas activity (AOGA) through the Application Management System (AMS). When applying for a microseismic monitoring site in AMS, the correct associated oil and gas activity type (AS_TYPE) to use in the spatial file is “MONS” (monitoring site), no other type will be accepted.

Microseismic monitoring applications are accepted on Crown land only, where monitoring sites are required outside the permitted wellsite area. The Regulator does not issue authorizations for associated oil and gas activities on private land. Additionally, microseismic activity on private land is an exempted activity under the ALC/OGC Delegation Agreement, therefore, an application to the Regulator for microseismic activity on private land is not required; but landowner agreements may be required.

Applicants are also required to provide the following information in the application description section, or as an attached rationale, when completing the application:

- a) The purpose of the program (seismicity, fracturing or completions, etc.)
- b) The type of equipment and installation method.
 - i. If the installation method is buried, the depth of equipment
 - ii. If the equipment permanent or non-permanent.
- c) If the monitoring program will be run continuously or intermittently.

Since a relatively small area of land may contain many geo stations, and there may be uncertainty regarding the exact locations, it is recommended that the application include a construction corridor.

Where microseismic monitoring equipment is installed in a wellbore, the permit holder must submit a Notice of Operations for the installation and removal of the equipment. No well permit amendment is required to install monitoring equipment in a wellbore.

4.6.5 Additional Considerations for Associated Oil & Gas Activities

Approvals from Other Jurisdictions for Camps

The Regulator 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: <https://prrd.bc.ca/temporary-use-permits/>.

The Northern Rockies Regional Municipality is cognizant of potential impacts on municipal services, infrastructure, and socioeconomics, resulting from the operation of worker camps within the NRRM Boundaries. The NRRM requires all camps to secure the appropriate zoning, or a Temporary Use Permit prior to camp construction or siting. For more information please contact the NRRM Regional Development and Planning Department: <https://www.northernrockies.ca/>.