

Chapter 5.6 Completing Application Information Details: Environmental Stewardship

5.6 Environmental Stewardship

Submission of an application for an energy resource 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 Regulator'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 [Energy Resource Activities Act](#) (ERAA) in order to conduct energy resource activities. Section 25(1) of ERAA states:

- The Regulator 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 while carrying out energy resource activities. The EPMR applies to energy resource activities on Crown land but does not apply to subsurface aspects of energy resource 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 energy resource 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 Regulator may make an informed decision while maintaining the values identified as Government environmental objectives. The consideration of an effect or change to an environmental value, whether material or adverse, is considered based on all available information.

5.6.2 Environmental Protection and Management Requirements

Part 3 of the EPMPR 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 (energy resource 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 Regulator.

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 and mitigation plan prepared by a Qualified Professional must be included as part of the permit application.

Areas Established by BCER

The Regulator has identified areas that require specific application guidance or may be subject to special permit conditions and/or advisory guidance. When proposed activities overlap these areas, a short explanation must be provided in

the rationale text box. Where required, a mitigation plan must also be submitted as part of the application.

Areas Established by BCER include environmental features and those that have additional safety, environment, and resource management concerns.

Areas Requiring a Mitigation Plan

Activities located in the following areas require a mitigation plan, as per Appendix B of the [Environmental Protection and Management Guideline](#), to be submitted with the application:

- **Peace Island Park** area is identified as a sensitive area, having high public use and recreation value. For all applications, the Regulator 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 Regulator 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 Regulator 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 Regulator encourages industry to avoid operations in this area.
- **Caribou Mitigation Zones:** Areas with a conservation or restoration focus or a Sustainable Resource Activity Area. These areas were established under the Intergovernmental Partnership Agreement for the Conservation of the Central Group of the Southern Mountain Caribou. A Caribou Impact Assessment and Mitigation Plan is to be submitted to the Caribou Recovery Committee. Please see the Environmental Protection and Management Guideline, Section 1.8.2, for further information.

- **Hudson's Hope Source Protection Area** is a protection area for the District of Hudson's Hope groundwater supply wells. For all applications, the Regulator encourages industry to avoid operations in this area.
- **Hot Water Physa Resource Review Area** is a protection area for *Physella wrighti*, a wildlife species endemic to Liard River Hot Springs Provincial Park and listed as Endangered under the *Species at Risk Act*. The area was established by Liard River Hot Springs Provincial Park (LRHSPP) and the Ministry of Energy, Mines and Low Carbon Innovation (EMLI) in support of the [recovery strategy](#) for Hot Water Physa. Guidance recommends no industrial directional drilling for gas within the 10 km referral zone. For all applications, the Regulator encourages industry to avoid operations in the area.

Please Note:

A permit may be required to conduct an activity in a Federally Listed Species at Risk Area: [Species at Risk: Permit Applications](#)

Areas Subject to Special Permit Conditions and Advisory Guidance

Activities located within the following areas may be subject to special permit conditions and/or advisory guidance, but have no additional application requirements (such as a mitigation plan):

- **INJ / DISP:** Potential high reservoir pressure zone. Location is within 2 km of a well used for fluid injection or disposal operation. Applicants are advised that drilling and completion programs should include the ability to control high pressure fluids. See Chapters 7, 8 and 9 of the [Energy Resource Activities Operation Manual](#) for additional drilling information.
- **Buick Creek – Silverberry:** A potential high reservoir pressure zone, Triassic formation. Applicants are advised that drilling and completion programs should include the ability to control high pressure fluids. See Chapters 7, 8 and 9 of the [Energy Resource Activities Operation Manual](#) for additional drilling information.
- **Heritage Montney Area:** A proposed well location is within or proximal to an oil accumulation. Applicants are advised that well primary product is subject to final determination after six months of production. See [Primary Product Determination for Montney Formation Wells](#) for further information.

- **Northern Montney Area:** A proposed well location is within or proximal to an oil accumulation. Applicants are advised that well primary product is subject to final determination after six months of production. See [Primary Product Determination for Montney Formation Wells](#) for further information
- **Ground Motion Monitoring Permit Condition Area:** Wells in this area are subject to ground motion monitoring requirements during hydraulic fracturing operations. Special permit conditions may be attached to well approvals. See Guidance for [Ground Motion Monitoring and Submission](#) for further information.
- **Kiskatinaw Seismic Monitoring and Mitigation Area:** Wells in this area are subject to the [Kiskatinaw Seismic Monitoring and Mitigation Area Special Project Area](#). See [INDB 2021-13](#) for additional information.
- **Farmington Development Area:** Activities located in this area are subject to the [Farmington Development Special Project Order](#). See [INDB 2018-26](#) for additional information.
- **Site C Project General Area:** Special permit conditions may be attached to well approvals in this area to protect the integrity of the Site C Dam.
- **Aitken Creek Gas Storage Reservoir** area is subject to a special project order under ERAA. 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.

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 prepared by a Qualified Professional must be included in the corresponding permit application to the Regulator.

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 energy resource 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 and mitigation plan prepared by a Qualified Professional 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.

Applicants may provide a short explanation in the rationale text box; however, the attached mitigation plans must be prepared and signed by a Qualified Professional.

Activities Intersecting Parks, Protected Areas or Ecological Reserves

Energy resource activity is not generally allowed within parks, protected areas or ecological reserves. However, there are extenuating circumstances where the Regulator 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 Regulator.

If energy resource activities cannot adhere to the guidance and recommendations, then justification and a mitigation plan prepared by a Qualified Professional is required. The justification should detail why it is necessary to operate within the park, protected area or ecological reserve, and the mitigation measures that will be implemented to minimize impacts. Park Use Permits issued by the [BC Ministry of Environment](#) 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 prepared by a Qualified Professional showing mitigation strategies to reduce impacts.

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

The Regulator may exempt energy resource 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 Regulator.

5.6.5 Guidance Variations

If energy resource activities cannot adhere to the Regulator'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. This rationale and mitigation must be prepared by a Qualified Professional

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. Mitigation plans may be needed for a variety of values and situations. Regardless of the trigger for a mitigation plan, the requirements and format stay consistent. This section provides links to 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, and must be a member, in good standing, of a governing body under the Professional Governance Act. 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 plan as part of the permit.

For further details on mitigation plans and their requirements please see Appendix B of the [Environmental Protection and Management Guideline](#).

Additional and over arching provincial policy on Environmental Mitigation Plans can be found [here](#).