

Construction Application Guidance for Facilities
Regulated Pursuant to The Mineral Industry
Environmental Protection Regulations, 1996

April 2024

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1. Introduction

This document provides guidance to proponents regulated pursuant to [The Mineral Industry Environmental Protection Regulations, 1996](#) (MIEPR) for the construction, alteration and extension of pollutant control facilities.

Prior to seeking permits under MIEPR, proponents should contact the [Environmental Assessment and Stewardship Branch](#) to ensure requirements under [The Environmental Assessment Act](#) have been met. New facilities may be required to submit a technical proposal for screening under the Act. If the project is determined to be a development as defined under the Act (either through the screening process or by self-declaring), the project will be required to complete an environmental impact assessment (EIA) and receive Ministerial Approval prior to obtaining any other permits. Further assessment and Ministerial Approval may also be required for changes to a planned or existing development prior to obtaining further permitting.

A complete application will expedite the approval process.

The construction application must be a stand-alone document to provide transparency to the public. Applicable information from the environmental impact statement (EIS) can be included in the application or referenced in support of the application. Commitments in the EIS and ministerial decision conditions must be maintained and considered in construction applications. The application shall include an environmental management plan for construction that describes the minimum standards to be implemented to avoid, mitigate and remediate adverse effects on the environment during the construction period.

An application is required for any facility that desires to construct, install, alter or extend a pollutant control facility. Certain exemptions from approval for minor changes to the operation, routine maintenance, reclamation plans, short-term tests and temporary modifications, and changes not resulting in releases to the environment may be granted. The applicant is advised to contact the Environmental Protection Branch (EPB) to discuss these details.

Phased construction approvals may be used if the company wishes to initiate certain aspects of the facility before having all the engineering in place for the entire facility, or the scope of the project is large and will take multiple years to construct. A plan that indicates the phases is required so the ministry understands when certain aspects of the facility or expansions of infrastructure are planned.

The process for applying and receiving an approval to operate is separate and distinct from the construction application and approval process. Before beginning operations, the company shall apply for approval to operate the works. Commissioning may be completed before the issuance of an approval to operate, provided the details are provided in the construction application.

Appendix A provides an example of an outline for environmental works for a specific operation. Appendix B provides links to guidance and regulations pertaining to mining operations.

2. Legislative Requirements

An application is required pursuant to section 6 of MIEPR to construct, install, alter or extend a pollutant control facility.

- 6(1) A person who desires to construct, install, alter or extend a pollutant control facility shall apply in writing to the minister for approval to do so.
- 6(2) The application is to include the following information and material or, if the information or material has been provided in an earlier submission to the minister, is to make reference to that information or material:
- (a) A statement of the nature of the wildlife, fisheries, air, water resources, soil and hydrogeology in the area of the facility;
 - (b) Site maps of the area of the facility showing topographical and drainage features of the area during construction, installation, alteration or extension, and as they will be on completion of the work proposed;
 - (c) A set of drawings and specifications of the construction, installation, alteration or extension proposed;
 - (d) A description of the proposed methods and procedures of the operation of the facility;
 - (e) A list of pollutants that may be stored or used in the facility;
 - (f) A time frame for the proposed construction, installation, alteration or extension;
 - (g) A contingency plan for preventing and cleaning up any spills of pollutants from the facility;
 - (h) A description of the proposed:
 - (i) Operating schedule; and
 - (ii) Methods and procedures for monitoring the operation of the facility to detect pollutants that may be discharged into the environment.

Other legislative requirements that may apply to the facility and are not covered in this guidance document include but may not be limited to:

- Storage of hazardous substances and waste dangerous goods;
- Industrial air source Environmental Protection Plan (EPP) pursuant to the Industrial Source (Air Quality) Chapter;
- Approval for human consumptive waterworks; and
- Approval for sewage works systems.

3. General Application Requirements

The following sections outline the general information required in the application. The proponent shall consider all environmental aspects of the project. Although attempts have been made for this guideline to be as comprehensive as possible, there may be aspects of the specific project not covered below that must be included in the application. Those aspects can be identified through collaboration and discussion with the Environmental Protection Branch.

3.1. Risk Management

The application needs to provide sufficient information and documentation considering all aspects and areas of the facility and their relationship to the project.

The application must demonstrate the following was considered and used in risk management and project planning:

- Site suitability;
- Impacts of the project on other aspects of the facility and environment;
- Potential offsite impacts to the environment that could result from construction and/or future operations; and
- Impacts to stakeholders.

The application shall include an environmental management plan for construction that describes the minimum standards to be implemented to avoid, mitigate and remediate adverse effects on the environment, ensure environmental commitments made in the environmental impact statement are addressed, and ensure environmental regulatory compliance.

Overarching construction and best management practices developed for the facility may be referenced in the construction application(s). Best management practices may include but are not limited to activities for limiting erosion, dust control, water management and species surveys during construction.

3.2. Project Overview, Scope and Schedule

A project overview should include:

- A statement defining the elements of the project scope as well as assumptions, project requirements and acceptance criteria. The project scope acts as the primary tool for stakeholders and the ministry to reference and use as a guide to accurately review the project.
- Project phases and schedules.
- Company information, including legal company name and corporate profile (Saskatchewan corporate registry profile report). Business license demonstrating the company is legally allowed to operate in Saskatchewan. Established facilities may choose to only indicate changes to previously submitted information.
- Documentation that indicates the company has control of the land through land title, lease agreement or an appropriate surface disposition in the legal company name.
- Project team and expertise.
- Geographic location, including spatial relationship to any existing infrastructure and proximity to the nearest town, city or village.

- Location of residences, occupied dwellings, and existing and proposed developments within one kilometre of the site.
- Geographical description (topographic map), including relation to nearby watercourses, groundwater resources, surficial geology, hydraulic gradients, baseline groundwater quality and flood plains.

3.3. Environmental Protection Considerations

The application must include design criteria and drawings for all environmental works, including but not limited to containment systems, ponds, processes, equipment, treatment systems, sanitary systems, material characterization and management, waste characterization and management, discharge systems, receiving areas and monitoring systems.

Environmental works should be designed to best management practices, best available technology, and recognized industry standards. Rationale shall be provided for alternative solutions. This information needs to be provided in the application where applicable.

3.4. Drawings

Design drawings shall include process flow diagrams, general arrangement, piping and instrumentation diagrams (if applicable). Drawings need to be the final design and not include conceptual language. Signed and sealed issued for construction drawings are required for pollutant control structures/equipment. This means the design is finalized and risk mitigation has been incorporated into the design. All design drawings shall be stamped and sealed by a professional engineer licensed by the Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS).

3.5. Quality Assurance and Quality Control

The application shall include a quality assurance and quality control (QA/QC) program for construction including but not limited to supervision, monitoring programs and procedures, inspection and testing plans, and procedures to meet the performance specifications of the approved design.

The application needs to include planned administrative controls, including changes to monitoring programs, operational changes, modifications to inspections, changes to contingency plans and emergency response plans, expected impacts to decommissioning and reclamation plan, and financial assurance.

Appended information should include drawings, modelling, assessment and monitoring data to support the application.

3.6. Construction Report

The company must submit a construction report within 90 days of completion including:

1. Final engineered drawings, including those indicating any deviations from the original design, duly signed and sealed by a person who has received a professional licence through APEGS.
2. A certificate signed and sealed by a person who has received a professional licence through APEGS, stating the “works” having been completed as per the:
 - a) Terms and conditions of the construction approval; and

- b) Design and specification approved by the ministry.
3. A technical report completed by a person who has received a professional licence through APEGS or as approved by the ministry, or QA/QC specialist, describing the QA/QC testing conducted on construction materials and during activities with results, analysis and interpretation, ensuring the “works” have been constructed as per the design/specifications approved in this permit.
4. Details on any deviations or alterations from the design/specifications in the permit, including those previously approved and the implications of those deviations on the approved design.
5. Details on any unauthorized discharges or discoveries.

4. Decommissioning and Reclamation Plans/Financial Assurances

Subject to MIEPR sections 13(1) and (2), no person shall operate or permanently close a pollutant control facility, mine or mill until a decommissioning and reclamation plan for the mining site, a proposal for an assurance fund, and the establishment of the assurance fund have been approved by the minister.

Conceptual decommissioning and reclamation plans are required prior to construction. The company should work with the Environmental Protection Officer on a schedule for an approved financial assurance.

5. Operation Application Guidance

The following may be required prior to an approval to operate being issued for the approved construction, installation, alteration or extension of the facility:

- Construction report;
- Commissioning plan;
- Operation plan;
- Proposed monitoring program or update to existing monitoring program;
- approved Environmental Protection Plan as per the Industrial Source (Air Quality) Chapter (if required);
- Emergency response plan; and
- Updated decommissioning and reclamation plan and associated financial assurance may be required. Exemptions may apply where construction or alterations do not significantly change the facility, associated decommissioning and reclamation activities, and costs.

6. Saskatchewan Ministry of Environment Contact Information

Tel: 1-800-567-4224 (toll-free in North America) or 306-787-2584.

Submit applications and reports through the Ministry of Environment’s online business portal. The portal and guidance on how to use the portal can be found at: saskatchewan.ca/business/environmental-protection-and-sustainability/environmental-online-business-portal.

Appendix A: Example of Environmental Considerations for Specific Environmental Works

- Site water and stormwater management descriptions:
 - Human consumptive water (separate application as per Waterworks and Sewage Works Regulations).
 - Sewage (separate application as per Waterworks and Sewage Works Regulations).
 - Treated sewage to tailings management area or offsite discharge consideration.
 - Facility industrial wastewater and effluent treatment considerations.
 - Management of treatment sludge:
 - Characterization.
 - Options and rationale for selected treatment method.
 - Storage and disposal methods.
 - Site industrial water and stormwater management plan:
 - How is water being captured?
 - Where is it being captured or diverted?
 - What treatment will be required, if any?
 - Discharge offsite or hauled offsite for disposal.
 - Downstream impacts/ plume dispersion studies within the receiving waterbodies.
 - Water monitoring parameters.
 - Process flow diagrams.
 - Drawings for infrastructure, such as ponds, discharge infrastructure, etc.
 - Environmental monitoring plan.
- Waste management descriptions:
 - Industrial waste management.
 - Domestic waste management.
 - Tailings, waste rock, and mill waste management:
 - Characterization, touchpoints, transportation, disposal and material flow paths.
 - Low-level radioactive waste management (LLRW):
 - LLRW characterization, interim disposal and containment, long-term disposal and incorporation into decommissioning plan.
 - Environmental monitoring plan.
- Hazardous substances and waste dangerous goods (HSWDG) information:
 - A list of all pollutants being stored or used:
 - Touchpoints, disposal and material flow paths.
- Mine/Mill and associated infrastructure:
 - Process diagrams.
 - Drawings, construction and material specifications of environmental infrastructure (containment structures, sewers, drains, wash bays, etc.).
 - Product handling and storage.
 - QA/QC.
 - Environmental monitoring plan.

- Tailing facility description and construction information:
 - Site suitability information (geology, hydrogeology).
 - Tailings characterization (geotechnical, geochemical properties).
 - Tailings deposition information (spigot, diffuser, injection).
 - Containment design (liner specifications, drainage structures, water cover, slurry wall, etc.):
 - Dyke and dam installation monitoring.
 - Emergency response plans that demonstrate an understanding of the consequences:
 - Can include inundation studies and communications plans.
 - Tailings deposition planning:
 - Placement strategies to support stability.
 - Drawings, construction and material specifications for environmental infrastructure.
 - Construction plans:
 - Site preparation details.
 - Operational constraints (PMP design, freeboard, segregation and mound management).
 - QA/QC.
 - Environmental monitoring plan.
- Ore and waste rock storage pads:
 - Ore and/or waste rock characterization (leachate chemistry, ABA testing).
 - Planned lifespan of the ore and waste rock storage pads.
 - Site suitability information (geology, hydrogeology).
 - Drawings.
 - Construction plans:
 - Containment design.
 - Grading and probable maximum precipitation event containment design.
 - Site preparation details.
 - QA/QC.
 - Environmental monitoring plan.
- Ponds (storm, industrial waste, sewage):
 - Expansions, new ponds:
 - Expected pond water quality.
 - Site suitability information (geology, hydrogeology).
 - Grading and probable maximum precipitation event containment design.
 - Drawings.
 - Construction plans:
 - Containment design (liners, leachate and contact water collection).
 - Site preparation details.
 - QA/QC.
 - Environmental monitoring plan.
- Effluent Lines and discharge:
 - Proposed discharge location and discharge depth.
 - Discharge method (diffuser, spigot).

- Final point of control.
- Upset management contingency plans.
- Drawings.
- Corridor assessment (habitat assessment, vegetation clearing, grading).
- Construction plans:
 - Line design (material, containment, grading, heat tracing).
 - Site preparation details.
 - QA/QC.
- Environmental monitoring plan.

The milling process will trigger the requirement for an environmental protection plan (EPP) in accordance with the [Industrial Source \(Air Quality\) \(ISAQ\) chapter](#) of the Saskatchewan Environmental Code. Other activities may also need to be included in the EPP if there are air emissions that may fall under the chapter.

Appendix B: Miscellaneous Links

MIEPR, mining guidelines, decommissioning and reclamation information, and applications:

[Mining Permits | Mineral Exploration and Mining | Government of Saskatchewan](#)

Financial assurance requirements/updates (bottom of the following webpage):

[Industrial Waste Construction | Industrial Activities | Government of Saskatchewan](#)

Hazardous materials storage:

[Hazardous Materials Storage | Hazardous Materials and Safe Waste Management | Government of Saskatchewan](#)

Hazardous spill reporting process:

[saskatchewan.ca/business/environmental-protection-and-sustainability/hazardous-materials-and-safe-waste-management/report-hazardous-spills#guidance](#)

Industrial Source (Air Quality) Code Chapter:

[Industrial Activities | Industrial Activities | Government of Saskatchewan](#)

Industrial Waste Works Operations Plan:

[publications.saskatchewan.ca/api/v1/products/102054/formats/112861/download](#)

Waste management:

[saskatchewan.ca/residents/environment-public-health-and-safety/solid-waste-management-facilities](#)

Human consumptive water and sewage works:

The Waterworks and Sewage Works Regulations [Publications Centre \(saskatchewan.ca\)](#)

Applications and Guidelines [Publications Centre \(saskatchewan.ca\)](#)