2015 GUIDELINES
for Mineral Exploration in Manitoba

MINING ASSOCIATION OF MANITOBA INC.
MINES.CA
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**INTRODUCTION**

Manitoba is unique and diverse in its landscapes and people. Mining and petroleum make up Manitoba’s second largest primary resources industry. Manitoba mines produce metals such as nickel, copper, zinc, gold, and cesium. They also produce industrial minerals (e.g. dolomite, gypsum). There are eight mines operating and in care and maintenance in Manitoba. Mining and mineral exploration in Manitoba is governed under The Mines and Minerals Act, 2011. The Act describes the law surrounding the application of the act, administration for mining, exploration, rights, recovery, and safety. The Act also describes the regulations that apply to mining in Manitoba.

Manitoba has worked to develop a vision that incorporates mineral exploration and mining with the sustainable development of the province and the acknowledgement of the inherent existing interest in the land of First Nations. As such, all phases in mining development must be consistent with practices that protect the environment and mitigate negative effects as much as possible. The mineral exploration guidelines for Manitoba are designed to direct all phases in mineral exploration in Manitoba towards best practices. This document is intended to assist government, Aboriginal communities and industry in the phases of exploration including application and approval processes in a single succinct document that addresses all areas of importance.

Manitoba recognizes that First Nations in Manitoba have existing Aboriginal and Treaty rights, and as First Nations, have ongoing stewardship obligations over their ancestral lands. Accordingly, First Nations have an interest that mineral exploration activities are conducted in a sustainable manner that minimizes the environmental impact. This document is intended to provide technical guidelines for conducting mineral exploration activities. It will complement the development of the Aboriginal Engagement: A Handbook for Proponents of Mineral Exploration and Mining in Manitoba, which will serve as a reference tool for mineral exploration and mining companies working in Manitoba, as well as for the communities and leaders proximal to mineral exploration in mining.

The Mining Association of Manitoba Inc. (MAMI), with the help of the Department of Mineral Resources and the Department of Conservation and Water Stewardship, has developed the 2015 Guidelines for Mineral Exploration in Manitoba as a dynamic tool that can be updated depending on changes in regulations and changes to proven best practice in mineral exploration. This document may be further improved with additional input.

Stakeholders are encouraged to provide feedback on these guidelines. Comments can be sent to:

*The Mining Association of Manitoba Inc.*
700-305 Broadway Winnipeg, MB R3C 3J7
Phone: (204) 989-1890 renaecampbell@mines.ca
DISCLAIMER AND OBJECTIVES

The 2015 Guidelines for Mineral Exploration in Manitoba may not be used to waive compliance with regulations and laws. The proponent is responsible for satisfying all legal requirements within Manitoba and Canada. Particular practices for context-specific issues cannot be given because solutions will depend on the circumstances and legal context of the jurisdiction.

This is intended to provide an updated source of information about best practices for mineral exploration. Guidelines are one part of developing a predictable process of mineral exploration, and ensuring an efficient and effective process is especially relevant to the current investment climate in mineral resources.

The guide identifies relevant legislative policy and regulatory requirements set out by the governments of Manitoba and Canada along with best practices that avoid and minimize environmental impacts and improve relationships among stakeholders. The document provides guidance in these areas but cannot be used as the sole resource in exploration; the other resources provided should be used to give specific details and clarity. These guidelines should be used in conjunction with other complimentary documents as well, such as the Aboriginal Engagement Handbook, and the Sustainable Development Mineral Strategy, which is helpful in understanding the vision for sustainable mineral development in Manitoba. Links to regulations, laws, and other guidance materials as well as contacts for further information are embedded in the document to provide quick access to essential information.

ACKNOWLEDGEMENTS

This document was written and adapted to Manitoba regulations by Morgan Vespa, a graduate of the Masters program at the Natural Resources Institute at the University of Manitoba. With the help of industry and government professionals, the information was enhanced to reflect Manitoba practices and experiences.

We would like to express appreciation towards the government of Saskatchewan and the Saskatchewan Mineral Exploration and Government Advisory Committee (SMEGAC) for providing the Mineral Exploration Guidelines for Saskatchewan and allowing for that document to be used as a template for the 2015 Guidelines for Mineral Exploration in Manitoba.
IMPORTANT CONTACTS

Department of Conservation and Water Stewardship
Department Central Location
Box 30, 200 Saulteaux Crescent
Winnipeg, MB R3J 3W3
Phone: (204) 945-6784
Toll Free: 1-800-214-6497
Email: mgi@gov.mb.ca

Regional Service and Park
Winnipeg District Office
Box 30, 200 Saulteaux Crescent
Winnipeg, MB R3J 3W3
Phone: (204) 945-7257

Note: It is important that any individual or company interested in mineral exploration contact the regional conservation office in the exploration area.

Eastern Regional Office
Lac du Bonnet
Box 4000
Lac du Bonnet, MB R0E 1A0
Phone: (204) 345-1431

Central Regional Office
Gimli
Box 6000
Gimli, MB ROC 1BO
Phone: (204) 642-6070

Western Regional Office
Brandon
Box 13 — 1129 Queens Avenue
Brandon, MB R7A 1L9
Phone: (204) 726-6441

Northwest Regional Office
The Pas
Box 2550 — 3rd Street and Ross Avenue
The Pas, MB R9A 1M4
Phone: (204) 627-8218

Northeast Regional Office
Thompson
Box 28 — 59 Elizabeth Rd.
Thompson MB R8N 1X4
Phone: (204) 677-6648

BizPal
This website provides information on obtaining and the requirements for business permits and licenses in the province of Manitoba: http://www.gov.mb.ca/emb/ci/bizpal/index.html

Tip Line (24 Hours)
Turn in poachers and report forest fires
Phone: 1-800-782-0076

Regional Health Authority
Use this website to determine which regional health authority is relevant to the exploration site. http://www.gov.mb.ca/health/rha/index.html
Map: http://www.gov.mb.ca/health/rha/map.html

Spill Reporting and Environmental Emergencies
(24 Hours)
Phone: (204) 944-4888
MAP 1

Department of Conservation & Water Stewardship, Land Protection (National and Provincial Parks)

COMMUNITY ENGAGEMENT

OVERVIEW

Areas with high mineral potential may also be areas in which Aboriginal peoples exercise Aboriginal and Treaty rights or carry out traditional activities. Potentially competing interests in resource extraction and traditional land use can be sources of tension among Aboriginal communities, government and the mining industry in Manitoba. MAMI recognizes the importance to our industry of government, exploration and mining companies, and Aboriginal communities working together to develop strong relationships, establish opportunities for communication and transparency and carry out truly effective, voluntary proponent engagement and Crown consultation processes.

It is important to emphasize that the principal goal of engagement is always for proponents to learn what, if anything, needs to be changed in their project plan while showing respect for the exercise of Aboriginal and treaty rights while operating in a community’s traditional territory.

We recognize that proponent engagement with Aboriginal communities potentially affected by exploration and mining activity can result in the development of information that is valuable to the Crown in carrying out its statutory and Constitutional duties of consultation.

We recognize that engagement can lead to relationships with communities that both contribute to economic development in communities and improve the economic outlook of mineral companies through the establishment of local business connections and the development of locally based workforces.

We recognize that Aboriginal and treaty rights have been the subject of numerous legal actions in recent years, often in relation to mineral resource activities. Many of these actions have resulted in new legal precedents that have helped clarify the practical implications of these rights as they apply to mineral resource projects and we expect further actions will continue to provide additional clarity over time. The intent of this document is to find a platform upon which mineral resource projects can move forward for mutual benefit in a manner consistent with the principles arising out of the case law.

Such engagement processes between proponents and First Nations, however, do not displace or substitute for the Crown’s constitutional obligations in relation to the proposed actions or decisions which have the potential to impact Aboriginal and Treat rights.

The Aboriginal Engagement Handbook: A Handbook for Proponents of Mineral Exploration and Mining in Manitoba is intended to set out a practical approach to support proponents of mineral exploration and mine development in engaging with Aboriginal communities in Manitoba. The following section provides relevant excerpts from the handbook that identify some of the most important elements of engagement.

Proponents are encouraged to read the handbook in its entirety prior to starting any project for a more fulsome discussion on developing relationships, building trust and communicating effectively at all stages of exploration and mine development. The handbook is currently being developed and will be available on the MAMI web site at www.mines.ca once completed.

UNITED NATIONS DECLARATION ON THE RIGHTS OF INDIGENOUS PEOPLES
(Courtesy AME BC, Aboriginal Engagement Guidebook)

The United Nations Declaration on the Rights of Indigenous Peoples (UNDPR) was adopted by the United Nations General Assembly on September 13, 2007. UNDRIP is a non-legally binding document that describes both individual and collective rights of Indigenous peoples around the world. It addresses issues such as culture, identity, language, health and education, and provides guidance to the signatories of UNDRIP, the United Nations, and other international organizations on harmonious, cooperative relationships with Indigenous peoples.
Free, Prior and Informed Consent (FPIC) is an aspirational principle contained within UNDRIP that would require states to obtain the consent of Indigenous peoples before making decisions that impact them within their traditional territories. FPIC does not supersede Canadian law with respect to the Crown’s responsibility to function as the decision maker in regulating industries or the Crown’s duty to consult and accommodate infringements on asserted or proven Aboriginal rights and title or treaty rights.

On November 12, 2010, Canada issued an endorsement of support for UNDRIP as an “aspirational” set of principles that does not supersede the domestic laws of the country. Canada supports the principles set out in UNDRIP (namely, equality, partnership, good faith and mutual respect) and takes the position that these principles are consistent with its established approach to working with Aboriginal peoples.

UNDRIP does not supersede Canadian law with respect to the Crown’s responsibility to function as the decision maker in regulating industries or the Crown’s duty to consult and accommodate infringements on asserted or proven Aboriginal rights and title or treaty rights. Neither does it create a veto right on the part of Aboriginal peoples or impose a legal obligation on the part of either the government or explorers to obtain the consent of an Aboriginal community for activities undertaken on Crown lands. Nonetheless, Aboriginal communities may have a different perspective on UNDRIP and FPIC and explorers should be aware of their significance.

**CONSULTATION AND ENGAGEMENT**

It is important to understand that consultation and engagement are not the same. Consultation refers specifically to activities undertaken by the Crown in relation to its Duty to Consult, an obligation created by section 35 of the Constitution Act 1982. Engagement is a series of desirable and recommended activities that companies may undertake in support of the Crown’s Duty to Consult. In short, governments consult and companies engage.

**CONSULTATION BY THE CROWN**

Both the Crown in right of Manitoba and Crown in right of Canada have duties to consult with rights-bearing communities before making decisions that could adversely affect the exercise of Aboriginal or treaty rights. While the federal government makes decisions in relation to protection of fisheries, navigation, migratory birds and the use of Indian Reserve land, Manitoba makes decisions regarding the use of all renewable and non-renewable resources on Crown land in the Province. The use of Crown land, the granting of rights to mineral resources on Crown land and environmental regulation of the mineral industry, whether on private or Crown land, under provincial jurisdiction.

The Manitoba government acknowledges its responsibility to consult in a meaningful way with Aboriginal peoples before making a decision that might adversely affect the exercise of Treaty or Aboriginal rights and, where appropriate, to develop meaningful ways to accommodate the concerns of Aboriginal communities about any potential adverse impacts on the exercise of their rights. Manitoba Mineral Resources has developed draft procedures related to consultation efforts for both mineral exploration and mine development.

The Crown also may expect a proponent to support its consultation efforts by participating in community meetings, providing information (such as is described below) and responding to the community’s questions. An invitation from the Crown to the proponent to participate in Crown consultation should be accepted and regarded as an opportunity to explain its project in an accurate, timely and useful manner and to help the Crown design, in a useful and constructive manner, any “accommodation” measures which may be required (for example, respecting the seasonal fluctuations in the activities of game in the region).
**Voluntary Engagement by the Project Proponent**

Voluntary proponent engagement is encouraged before applications are made that may trigger the Crown duty to consult. Proponents are encouraged to initiate engagement prior to undertaking any exploration or mining activities which have the potential to affect their Aboriginal or treaty rights or traditional lands and resources. The information obtained through voluntary engagement helps the proponent plan its proposed project in a way which avoids adverse effects on Aboriginal rights and interests and, if it is well documented, can be included in applications for permits and approvals and used by the Crown to inform its consultation process.

Manitoba regulatory authorities appreciate receiving well-documented engagement records. Early engagement by the proponent helps facilitate a more efficient and timely Crown consultation process by identifying and addressing community concerns before regulatory applications are made. Avoidance and mitigation measures developed by the proponent can be incorporated into permits and approvals and may be used by the Crown to fulfil some aspects of its duty to accommodate First Nations whose Aboriginal or treaty rights may be affected by the proposed activity.

Engagement may have three very different but complementary goals:

+ Achieving understandings with an Aboriginal community about proposed exploration or mining activities through a respectful process of engagement consistent, wherever possible, with the community’s traditional laws, protocols and stewardship responsibilities;
+ Sharing and obtaining the information needed to plan the proposed project in a way which respects Aboriginal interests and thus also producing a record relevant to Crown consultation; and
+ Involving the Aboriginal community in business and employment opportunities that may flow from the project.

Many Aboriginal communities in Manitoba have expressed interest in building lasting relationships with the mining industry. Early engagement can help establish working relationships that can last through the mining life cycle, from early exploration to mine closure.

Project planning should include providing for sufficient funding and time in the schedule for meaningful engagement to occur. Funding for exploration should include the costs of supporting engagement, including expenses related to producing material to display the proposed project and potentially also expenses related to compensating elders, resource users and traditional knowledge holders for sharing their knowledge and expertise as appropriate.

Early engagement helps proponents establish reasonable and realizable expectations for Aboriginal participation in their projects. Over time, proponents can also build a reputation for sharing useful information, showing respect for traditional knowledge and avoiding adverse impact on Aboriginal use of resources.

The following sections outline a practical approach for deciding what type of engagement and how much engagement is appropriate for the stages of early exploration, longer-term or more intensive exploration, and mining and closure.

**The Mining Board**

The Mining Board is established under The Mines and Minerals Act. The primary function of the board is the arbitration of disputes between surface rights holders and mineral rights holders with respect to accessing of minerals other than oil and gas. The board can also hear and resolve disputes between holders of mineral dispositions and between holders and officers of the Department of Mineral Resources.
Related Acts and Regulations
The Mines and Minerals Act
Provincial Consultation Policy

Other Resources
Draft Provincial Policy for Crown Consultation with Aboriginal Peoples
Procedures for Crown Consultation with Aboriginal Communities on Mineral Exploration (draft)
Interim Provincial Policy and Guidelines for Crown Consultations with First Nations, Métis Communities and Other Aboriginal Communities
Crown Aboriginal Consultation Participation Fund Community Guide

Contacts
Aboriginal Consultation Unit
Aboriginal Affairs Secretariat
Department of Aboriginal and Northern Affairs
Government of Manitoba
Phone: 1-800-282-8069 or 204-945-5236
200 - 500 Portage Avenue
Winnipeg, MB | R3C 3X1

Mining Board
Presiding Member - Bill Brant
Vice President, Manitoba Division, WSP
Deputy Presiding Member - Henry Linklater

Members:
Dr. Norm Halden, Dean, Clayton H. Riddell
Faculty of Environment, Earth, and Resources,
University of Manitoba
MAP 2

Federal Map – First Nations and Treaty Areas in Manitoba

https://www.aadnc-aandc.gc.ca/eng/1100100020576/1100100020578
PERMITTING AND LICENSING

The application guidelines in this section provide guidance on the permitting required for conducting mineral exploration in Manitoba. These applications may include a license to explore, a camp permit, a work permit, and an environmental license, depending on the stage of exploration. Listed in this section are the general guidelines for a work permit and an environmental license. Other permits may be required in addition to the work permit depending on the phase of exploration. Table 1 below outlines the stages of exploration and which permits may be required at each phase.

Table 1: Permitting and Licensing for Mineral Exploration

<table>
<thead>
<tr>
<th>STAGE</th>
<th>LICENSE PERMIT THAT MAY BE REQUIRED</th>
<th>DEPARTMENT/POSITION RESPONSIBLE FOR ISSUING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration</td>
<td>+ Registered under The Corporations Act</td>
<td>+ Manitoba Consumer and Corporate Affairs - Companies Office</td>
</tr>
<tr>
<td>Preparation</td>
<td>+ Prospecting License</td>
<td>+ Department of Mineral Resources</td>
</tr>
<tr>
<td>Grassroots Exploration</td>
<td>+ Work Permit + Blasting Certificate + Storing Explosives Permit</td>
<td>+ Department of Conservation and Water Stewardship + Notify Director of Mines + Director of Mines Inspection + Mines Inspector</td>
</tr>
<tr>
<td>Mineral Acquisition</td>
<td>+ Mineral Exploration License + Zone A License + Zone B License + Recording a Claim</td>
<td>+ Department of Mineral Resources</td>
</tr>
<tr>
<td>Early Exploration</td>
<td>+ Application for Borehole License + Timber Permit + Burn Permit + Work Permit</td>
<td>+ Department of Mineral Resources + Regional Conservation Office + Regional Conservation Office + Department of Conservation and Water Stewardship</td>
</tr>
<tr>
<td>Road Permits</td>
<td>+ Build or change access + Road construction in conservation area</td>
<td>+ Department of Infrastructure and Transportation + Department of Conservation and Water Stewardship</td>
</tr>
<tr>
<td>Temporary Camp Permits</td>
<td>+ Camp Plan Approval + Temporary Camp Permits + Crown Land Use Permit + Provincial Park Camp Permit</td>
<td>+ Fire Commissioners Office + Fire Commissioners Office + Crown Lands and Property Agency + Parks and Natural Areas</td>
</tr>
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</table>
Any company conducting business in Manitoba must be registered under The Corporations Act, administered by Manitoba Consumer and Corporate Affairs. The Companies Office can be contacted to address any questions with regards to registration.

**PROSPECTING LICENSE**

An individual must have a prospecting license in order to conduct mineral exploration on Crown land in Manitoba. A prospecting license gives an individual the right to explore and stake claims on Crown land. An individual must be 18 years of age or older to obtain the life-time, non-transferable license. In the same respect, a company intending to hold or apply for a mineral exploration license must obtain a company prospecting license. Applications can be filed with the Department of Mineral Resources.

**Individual** – Complete an Application for Prospecting License (*Form MB1, Appendix 1*)

**Company** – Complete an Application for Prospecting License (*Form MB2, Appendix 2*)

**WORKING WITHOUT A PROSPECTING LICENSE**

The Mines and Minerals Act, M162 makes provision for a person to work on behalf of and under the direction of a licensee, to perform such duties as cutting line, erecting posts, operating equipment, etc., without a prospecting license.

There are four categories to consider when investigating potential exploration sites:

- Procedures for Crown Consultation with Aboriginal Communities
- Network of Protected Areas
- Land Access for Mineral Exploration
- Manitoba Minerals Guideline

During the various exploration stages, the Mines Inspector is not only responsible for approving exploration construction plans and new mine plans, but can also be a knowledgeable source of workplace safety and health information. For instance, if you’re planning to begin significant diamond drilling, contact a Mines Inspector.

**LAND USE AND TENURE**

Manitoba contains large tracts of land that contain high mineral potential. Mineral exploration is encouraged and protected by government policy, practices, and regulations that address the issues of land access, stability of the permitting process, and security of tenure for valid mineral dispositions.

Manitoba’s Provincial Planning Regulation provides comprehensive policy and legal protection for Manitoba’s mineral resources:

The Sustainable Development Mineral Strategy, as outlined in the Manitoba Government’s report Applying Manitoba’s Mineral Policies, defines the concept of sustainable development for Manitoba’s mining sector and provides an approved management framework for implementation.

**Network of Special Places**

There are several types of provincial Crown land encumbrances that restrict or prohibit mineral exploration and future mine development. When investigating potential exploration sites, contact Mines Branch for assistance in screening potential land use restrictions.

**National Parks**

Riding Mountain, Wapusk and the proposed Manitoba Lowlands National Park protect representative examples of Manitoba’s landscape. Mineral exploration and mine development have been legally banned.

**Ecological Reserves**

Ecological Reserves protect critical habitat, endangered plant and animal species, and representative natural landscapes. In national parks, mineral exploration and development is not permitted within an ecological reserve.

**Provincial Parks**

A new system plan for managing land use activities
within provincial parks has recently been adopted. Mining activity is not permitted within Wilderness Parks or wilderness, backcountry or heritage land use categories. Natural parks and other land use categories are multiple-use lands and allow mining activity.

Heritage Sites
Designated heritage sites protect the tangible and intangible aspects of our natural and cultural past from prehistory to present and include artifacts, documents, sites, properties and structures. Since 1991, Manitoba has designated 46 heritage sites bringing the total to 140. Mineral exploration is not legally permitted within lands designated as a heritage site.

Wildlife Management
Wildlife lands are designated for the management, conservation and protection of habitat and wildlife resources. Most wildlife management areas contain multiple use lands and accommodate mineral exploration. Currently all wildlife management areas are being assessed for their suitability to be nominated as endangered spaces.

WORK PERMITS
Work Permits are required to conduct field work on Crown Lands. Authority to enter is under the Mines and Minerals Act. Work permits are issued by the Department of Conservation and Water Stewardship. Understanding the process and steps in obtaining a work permit is important, and knowing the expected timelines for the completion of the steps can be helpful in planning an exploration program. An application for a work permit is reviewed by the Department of Conservation and Water Stewardship to assess the potential impacts on Crown land. The work permit application process also triggers the Crown-Aboriginal consultation process that runs in parallel. The timeframe for work permit issuance generally takes 30 to 60 days, but can take longer in cases of more complex or involved Crown consultation processes.

The time requirements to complete permitting and authorizations lengthen when moving into advanced exploration plans. Advanced exploration requires approval of an advanced exploration and closure plan and possible an environmental license. This also requires longer times for Crown consultation.

In order to conduct field work any individual or company requires a work permit from the Department of Conservation and Water Stewardship. The Department of Conservation and Water Stewardship’s Lands and Geomatics branch can help in locating the regional/district office closest to the work site.

To apply, contact the Department of Conservation and Water Stewardship. Depending on where the exploration site is located, different branches will be contacted:

- Crown land: Lands and Geomatics Branch
- Provincial parks: Parks and Natural Areas Branch
- Provincial forest: Forestry
- Wildlife management areas: Wildlife Lands Specialist, Wildlife and Ecosystem Protection Branch

Mineral exploration is prohibited in wildlife management areas except under authority of a permit issued by the Minister of Conservation and Water Stewardship or his/her designate. A wildlife management area use permit is issued by the Director of Wildlife and Ecosystem Protection Branch or the Regional Director. These permits are considered on a case-by-case basis. Contact the Wildlife Lands Specialist for more information.

A work permit addresses the conditions that must be followed in working within an area, and deals specifically with the planned exploration activities. It also provides the necessary fire prevention measures required for operating in wooded areas.

Failure to comply with the terms and conditions of a work permit is an offense punishable by a fine. Also, keep in mind, a work permit is issued annually and must then be renewed. If during that period, the level of activity changes significantly, then amendments must be made to your existing permit. In addition, if you are exploring in a provincial park, a separate
work permit is required for each phase of exploration.

WORK PERMIT APPLICATION INFORMATION REQUIREMENTS

Applicant information or corporate information such as name, address, telephone number, fax number, supervisor information.

Project Description
+ Include the type/purpose, location, and start/ completion date.
+ Include the Authority (add examples such as MEL#, Claim # etc.) for mineral being explored and type of mineral to be explored.
+ Outline the duration of the operation, complete with start and stop dates.
+ Give approximate UTM Lat/Long locations of all drill sites, if known, and camp description and location.
+ Provide a brief and detailed description of the work that includes any access roads (existing and new), stages of the operation, and an impact statement with mitigation measures to be put in place.
+ The work permit application is available on-line and is to be submitted to the appropriate CWS district office.

Appended to the Application
+ A large-scale map identifying proposed activities
+ Specific locations of proposed activities Maps
+ Include maps that show approximate drill collar locations, camp location, stream crossings and existing and new access locations.
+ A map of a minimum 1:50,000 scale showing camp locations and the siting of any new roads is required.
+ Indicate on a map or maps, what existing trails/roads will be used as well as any trails/roads that will be improved or proposed new trails/roads.

**Electronic applications are preferred.

Forest Clearing/Harvesting Operations – BMP 3
+ Outline any clearing which may be required including: new trails/roads, work camps, sumps, drill pads, etc., or widening of existing trails.
+ Indicate what will be done with any merchantable timber that may be harvested.
+ Indicate the disposal method for non-merchantable timber.

Temporary Work Camps – BMP 4
+ Must indicate where the staff will be staying, i.e. private accommodations or a work camp on Crown land.
+ If a camp will be established on Crown land a permit is required.
+ If needed, indicate the type of water and septic systems.

Fuel Handling and Storage – BMP 6
+ Indicate if and how fuel will be stored on site.
+ Also indicate if a containment berm and spill kit will be on site.

Fire Prevention and Control – BMP 7
+ A work permit is required under The Wildfires Act if operations are conducted in the Burning Permit area.
+ A list of required firefighting equipment is provided in BMP-006 and is required during the wildfire season, April 1 – November 15.

Road and Trail Access – BMP 8
+ Outline how the work camps and drill sites will be accessed.
+ Indicate which existing roads are available (winter and summer) and where and how new access roads will be constructed.

Water Crossings – BMP 9
+ All of the water crossings that will be used should be indicated on a map.
+ Outline how each crossing will be established and reclaimed.

Exploration Trenching and Hydraulic Stripping – BMP 10
+ All activities such as trenching or stripping must be identified in the description of the operation.
+ Trenches should be sketched to show as close as possible the locations of each and the dimension.
Drilling on Land and Ice – BMP 11 and BMP 12
+ All drilling operations must be identified in the description of the operation.
+ The impact statement will also describe how the impacts of drilling will be mitigated.

Restoration – BMP 14
+ Outline how all newly disturbed locations (roads, trails, drill pads, sumps and camp sites) will be restored.

Additional information for work permit applicants is contained in Appendix 3.

For a more detailed description of requirements, see the Crown land work permit application ** and ** visually depict the workflow and state the timelines for review of applications for different work permit activities.

**ENVIRONMENT ACT LICENSE**
A key regulatory factor during later stages of exploration is The Environment Act E125. During advanced exploration a proponent may be required, depending on the scope of the project, to submit a proposal to Manitoba Conservation and Water Stewardship. You will be advised, in the response to your advanced exploration proposal, whether this is required. In Manitoba, approval of a Stage 1, Environment Act License for advanced exploration typically takes 60 days or less.

To move into production you will need to submit an Environmental Impact Statement (EIS) to qualify for, and receive an Environment Act License. The time frame for this stage is generally dependent on the nature and location of the project, and whether or not there is a public hearing. The permitting process usually takes from three to six months if a public hearing is not required, and eight months if one is necessary. The criteria for triggering a public hearing is addressed in Step 4 - Public Hearings.

**Step 2 - Screening (Mandatory)**
The proposal is reviewed by the public and a Technical Advisory Committee to determine whether any of the following are required: more information; a comprehensive Environmental Impact Statement (EIS); and in some cases a public hearing. The Technical Advisory Committee consists of representatives from provincial and federal government departments. The public review is conducted through a media advertisement and the placement of the proposal material in public registry files located in government offices and public libraries across the province. At the end of this screening step your proposal will be forwarded to Step 3 and / or Step 4, or will progress directly to Step 5 - the licensing decision.

Time Frame: If at the end of Step 2, the proposal information is acceptable to the public, the Technical Advisory Committee, and the department, then a licensing decision is generally made within eight weeks of the proposal receipt date.

**Step 3 - Further Information (Discretionary)**
If Step 2 results in the need for further information, Conservation will forward questions to you directly. The additional information, once received, is also screened

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accordance with Manitoba Regulation 163/88 - Licensing Procedures. It requests information such as certificate of title, land use designation, a description of the proposed development and operating methods, fuel storage capabilities, potential environmental impacts and environmental management practices to be used at the site.

Take the time to meet with Conservation staff and the public, prior to submitting the proposal. This consultation will allow potential concerns to be addressed early in the process. Make your initial proposal as comprehensive as possible and avoid the need to submit further information later on. If you have any questions on the issues to be addressed, or the information required, contact the Director of Environmental Approvals, Manitoba Conservation and Water Stewardship. To file a proposal contact the Director of Environmental Approvals.
through the public and the Technical Advisory Committee for review and comment. A comprehensive initial proposal can avoid the delays associated with this step.

Time Frame: If further information is required, an additional six weeks of review time is required. The time required to prepare the additional information is controlled by the client.

If through the screening step it is determined that a comprehensive Environmental Impact Statement (EIS) is required, Conservation and the Technical Advisory Committee will provide you with EIS guidelines specific to your project.

Time Frame: If guidelines and an EIS are required, an additional 12 weeks of review time is required. The time to prepare the EIS is controlled by the client.

**Step 4 - Public Hearings (Discretionary)**
Hearings are not mandatory under The Environment Act E125, but generally are called where a development proposal is of general concern or will affect a large number of Manitobans; or where significant public concerns are identified as a result of the screening process. Hearings are conducted by an independent panel called the Clean Environment Commission. The Commission’s role is to conduct hearings and to provide advice and recommendations to the Minister based on evidence received during the hearing process. The final decision on the development proposal rests with Manitoba Conservation and Water Stewardship.

Time Frame: If public hearings are required, an additional 15 weeks of review time is required.

**Step 5 - Licensing Decision (Mandatory)**
Once the assessment process has been completed Conservation will either issue an Environment Act license with limits, terms and conditions, or refuse a license.

Appeals - All decisions under The Environment Act E125 may be appealed within 30 days as detailed in the act.

Streamlining - Some developments may require both provincial and federal environmental approval prior to proceeding. In an effort to minimize duplication, delay and confusion we have entered into an environmental assessment agreement with the Government of Canada.

We have agreed to cooperate and coordinate respective environmental assessment processes. The result is an effective and consistent licensing process which is available in this province.

Call Conservation at a very early stage to determine whether both federal and provincial environmental approvals are required.

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**GUIDELINES FOR AN ENVIRONMENTAL IMPACT STATEMENT**

Any new mine development will require the submission of an EIS. As part of the licensing process, the Technical Advisory Committee and Conservation prepare specific guidelines for each proposed development.

During the preparation of the EIS, make use of the experience and expertise of the project’s Technical Advisory Committee. This committee will provide you with any required interpretation of the EIS guidelines and ongoing feedback about the content and methodology of the statement.

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**ENVIRONMENTAL IMPACT STATEMENT INFORMATION REQUIREMENTS:**

- An overview of the project’s location, scope and duration
- A site description including the surrounding area
- Plans and description of proposed on-site and off-site facilities
- Proposed on-site and off-site development and operational processes together with identification of inputs (water, fuel, chemicals etc.) and outputs (pollutants etc. from the processes
- Assessment of the effects on the “natural” environment including: health of workers and neighbours, use of surrounding resources, and the socioeconomic environment,
+ Proposed mitigating measures to minimize adverse impacts
+ Contingency plans to handle non-routine events that could affect the environment
+ Proposed environmental monitoring facilities
+ Closure plans (MR 67/99)
+ Public awareness program
+ Technical references supporting the environmental impact assessment

RELATED ACTS AND REGULATIONS
Corporations Act C225 (Part I) s. 1 to 199.3 (Parts 1 to 16)
Corporations Act C225 (Part II) s. 200 to 376 (Parts 17 to 23)
Corporation Capital Tax Act, C226
Mines and Minerals Act, M162
Mineral Disposition and Mineral Lease Regulation 64/92
Securities Act S50 (Part I) s. 1 - 99
Securities Act S50 (Part II) s. 100 - 162
Business Names Registration Act, B110
Environment Act, E125
Public Health Act, P210
Workplace Safety and Health Act, W210
Mines and Minerals Act, M162
Mining and Metallurgy Compensation Act, M190
Provincial Parks Act, P20
Manitoba Regulation 7/91 changed to Park Activity Regulation
Crown Lands Act and Regulations
Wildfires Act and Regulations
Operation of Mines Regulations
Workplace Safety and Health Act
Wildlife Act and Regulations

Government of Canada
Canadian Environmental Protection Act
Fisheries Act
Canada Wildlife Act
Proposed Federal Endangered Species Protection Legislation
The Fisheries Act, Metal Mining Liquid Effluent Regulations

Construction and Operations - Site Access and Preparation
Mines and Minerals Act, M162
Manitoba Mineral Disposition and Mineral Lease

Environment Act, E125 Section 4 Manitoba Mine Closure
Regulation 64/92
Fires Prevention and Emergency Response Act, P80,
Section 29
Crown Lands Act, C340, Section 7
Provincial Parks Act, P20
Provincial Planning Regulation, Policy Area 8
Forest Act, F150
Environment Act, E125 and Environment Act Regulations

Equipment, Security, Ventilation, Mechanical and Electrical,
Ground Support, Ground Stability, De-Watering and
Pumping, Air Quality; Noise Abatement
Workplace Safety and Health Act, W210
Workplace Safety and Health Regulation 217/06
Environment Act, E125 and Environment Act Regulations

Labour and Immigration
Workplace Safety and Health Act, W210
Workplace Safety and Health Regulation 217/06
Employment Standards Code, E110
Construction Industries Wages Act, C190

Fuel Storage
Dangerous Goods Handling and Transportation Act, D12
Manitoba Regulation 188/2001 (Storage and Handling of
Petroleum Products and Allied Products
Regulation)

Safety and Health - Workplace Health and Material
Information, First Aid, Sanitation, Ventilation, Fire,
Mine Rescue
Workplace Safety and Health Act, W210
Manitoba Regulation 228/94 (Operation of Mines Regulation)
Workplace Safety and Health Regulation 217/06

Environmental - Water Quality, Mine Drainage, Mine
Waste, Sewage
Environment Act, E125
Manitoba Regulation 91/88R, (Incinerators Regulation)
Manitoba Regulation 92/88R, (Litter Regulation)
Manitoba Regulation 83/2003, (Onsite Wastewater
Management Systems Regulation) Manitoba Regulation
150/91, (Waste Disposal Grounds Regulation) Public Health Act, P210
Water Rights Act, W80

Other Guidance Documents
Procedures for Crown Consultation with Aboriginal Communities
Network of Protected Areas
Land Access for Mineral Exploration
Manitoba Minerals Guideline
Sustainable Development Mineral Strategy
Crown Land Work Permit application
Manitoba Stream Crossing Guidelines
Consolidated Buffer Management Guidelines
Info for Mineral Exploration Work Permit Applicants

Resources for Preparing a Stage 1 Environmental License Proposal
Contact Manitoba Conservation and Water Stewardship and/or the Chief Mining Engineer in the Mines Branch for any of the following materials:

+ Towards a Sustainable Development Strategy for Manitobans
+ Manitoba Land and Water Strategy
+ Environment Act, E125
+ Manitoba Regulation 164/88 (Classes of Development Regulation)
+ Manitoba Regulation 163/88 (Licensing Procedures Regulation)
+ Participants’ Guide for a Public Hearing
+ Clean Environment Commission Process Guidelines Respecting Public Hearings
+ Ambient Air Criteria
+ Guidelines for Sound Pollution
+ Atmospheric Emission Criteria
+ Recommended Buffer Zones for Protecting Fish Resources in Lakes and Streams, in Forest Cutting Areas
+ Recommended Fish Protection Procedures for Stream Crossings in Manitoba
+ Policy for the Management of Fish Habitat - Federal Department of Fisheries and Oceans
+ Manitoba Surface Water Quality Objectives (MSWQO)
+ Public Registry Files: Conservation and Environment Library
CONTACTS

Regional Parks and Regional Services
(District / Regional office
See page 6 for complete listing.

Companies Office
Business and Corporate Inquiries and Feedback
1010-405 Broadway
Winnipeg, MB R3C 3L6
Phone: (204) 945-2500
Toll-free: 1-888-246-8353 (in Manitoba)
Fax: (204) 945-1459
Email: companies@gov.mb.ca

Mines Inspector, Mines Inspections Branch
Manitoba Labour and Immigration
200-401 York Avenue
Winnipeg, MB R3C 0P8
Phone: (204) 945-8083
Fax: (204) 948-2209

Public Information & Inquiries
Parks and Natural Areas Branch
Manitoba Conservation and Water Stewardship
Box 22 - 200 Saulteaux Crescent
Winnipeg, MB R3J 3W3
Phone: (204) 945-6784
Toll Free: 1-800-214-6497
http://www.gov.mb.ca/conservation/parks/contact.html

Forestry Branch
Manitoba Conservation and Water Stewardship
200 Saulteaux Crescent, Box 70
Winnipeg, MB R3J 3W3
Phone: (204) 945-7989
Email: forestinfo@gov.mb.ca

Wildlife Branch
Manitoba Conservation and Water Stewardship
Box 24, 200 Saulteaux Crescent
Winnipeg, MB R3J 3W3
Phone: (204) 945-7775
Fax: (204) 945-3077

Environmental Approvals
Environmental Assessment and Licensing Branch
Manitoba Conservation and Water Stewardship
123 Main St Suite 160
Winnipeg, MB R3C 1A5
Phone: (204) 945-7071
Fax: (204) 945-5229
General Inquiry: (204) 945-8321 or (204) 945-5229
Staking itself is not viewed as having a significant impact on the environment. However, associated activities such as the establishment of temporary camps require permits; see BMP 4 (Temporary Work Camps). Knowing the regulations surrounding staking a claim are very important.

There are two ways to acquire exploration and/or mining rights to Crown lands: Mineral Exploration Licenses (MELs) and mining claims. Separate arrangements must be made with the owner(s) of private surface rights or legal occupants of Crown land before any surface exploration activities take place.

The staker is responsible for ensuring that the area in question is open for staking. A mining claim is a parcel of Crown mineral land held to explore for and develop minerals. Mining claims can vary in size from a minimum of 16 hectares to a maximum of 256 hectares.

Before Staking a Claim:
+ Obtain a prospecting license (see Application Guidelines)
+ Purchase claim maps from Recording Office
+ Check The Mines and Minerals Act and Regulations for staking, recording and holding a mining claim
+ Purchase claim tags from the Department of Mineral Resources

When planning an exploration program and before staking a claim, understanding the land use and tenure in the area is critically important. There are different uses for land in Manitoba and some areas restrict mineral exploration and development. See Map 3 for a visual representation of the land uses in Manitoba. Types of land uses that may affect mineral exploration are:

- **TREATY LAND ENTITLEMENT (TLE)**
  Lands selected by First Nation for Treaty Land Entitlement are not generally available for mineral exploration. Approval for mineral exploration must be given by the appropriate First Nation Band.

- **COMMUNITY INTEREST ZONES (CIZ)**
  Explorationists may stake, develop mineral claims and obtain mineral leases within lands identified as Community Interest Zones. Exploration permits must however be reviewed and approved by affected First Nations.

- **NORTHERN FLOOD HOLD AREAS**
  Land compensation for outstanding claims for flooding damage will be turned over to First Nations to become reserve land. Mineral exploration is generally not permitted within these hold areas.

- **RESOURCE MANAGEMENT AREAS**
  Resource co-management areas and boards are established to provide advice on resource use and allocation issues within the resource management area. The Resource Management Boards will review requests for resource allocations, including any applications for land use permits, with respect to lands and resources within the Resource Management Area. The Board may, within forty-five (45) days of referral, submit resolutions with respect to such allocations or land uses. In the absence of a resolution being submitted within the time provided, Manitoba may process the said applications for land use permits. It is recommended that the appropriate Resource Management Board is contacted for introductions and notification of any works that are planned.
PROVINCIAL PARKS

Many provincial parks are available for claim staking. Special conditions apply with respect to park access and the manner in which claims can be staked. The Department of Conservation and Water Stewardship should be contacted before staking claims in provincial parks.

STAKING A CLAIM

A claim must have the appropriate claim tag securely fastened to each corner post. Put the tag on the side of the post facing the next highest numbered corner post. Put the tag for the No. 4 post on the side facing the No. 1 post (see Figure 1).

There are two choices with respect to claim tags:
1. You can stake a claim, record it, and then buy tags.
   You have one year to put the tags on the corner posts of the claim or;
2. You can buy your tags before staking and attach the tags to the posts as you stake.

IN UNSURVEYED TERRITORY

A mining claim in unsurveyed territory should be approximately rectangular in shape. The length cannot be greater than four times the width and no side can be less than 400 metres in length. The area of a claim cannot exceed 256 hectares. The location of the mining claim determines the mining district the claim is registered in.

Be sure of your location on the ground before staking. Surrounding claims, lakes, rivers, streams, roads, or anything else can help locate your position and identify your location.

Cut and erect square posts (posts of previous claims cannot be used) at each corner of the claim. A claim is staked starting with claim post No. 1 at the northeast corner of the claim. The claim is staked in a clockwise direction; No. 2 post at the southeast corner; No. 3 post at the southwest corner; No. 4 post at the northwest corner, finishing at post No. 1.

Distances between posts, of any kind on land, cannot exceed 400 metres. Where a claim boundary is greater than 400 metres between corner posts, boundary posts must be erected. Distances between boundary posts cannot be greater than 400 metres.

The claim boundary must be clearly marked between posts by blazing trees at frequent intervals, some cutting of underbrush, placing pickets or any other way to make the boundary easily followed. Markings from a previous claim may not be used.

Planted posts or trees made into posts, must be at least 1.2 metres in height and the top 50 cm. must be squared. Each squared face on a planted post shall as nearly as possible be 8 cm. wide (see Figure 2). Squared faces of a tree made into a post will be of sufficient width to write the required information on it.

On the four corner posts, attach the metal claim tag and write (preferably in pencil) on the side of the post facing the next corner: the number of the post; the name of the claim (no initials or words less than three letters allowed); the name of the staker; the time and date the post was located; and on the No. 1 post, the time and date you finished staking the claim.

On boundary posts write (preferably in pencil): the letters “BP”; the name of the claim; the name of the staker; and the time and date the post was located. Write information on the side of the post that faces the next highest numbered corner post. When erecting boundary posts
between the No. 4 and No. 1 posts, write on the side that faces the No. 1 post (see Figure 1). If staking a group of claims with common boundaries, use one post at common locations for touching claims. Write the information for each claim on the correct side of the post.

A witness post is used when a corner post or intersection post cannot be put in its true location due to water or some other obstacle (see Figure 3). Put the witness post as close to its true location as possible along the claim boundary. On these posts write “WP” as well as: the direction and distance to where the post should have been placed; the claim name; the name of the staker; time and date the post was located; and for corner posts - the post number. The writing and tag (if it is a corner post) go on the side of the post facing the direction the post should be located.

An intersection post is used to show a change in direction of a claim boundary between two corner posts. On these posts write “IP” and a letter of the alphabet starting with “A”, the claim name, the name of the staker, time and date the post was located.

An area of ground less than 16 hectares that is open for staking between two claims can be staked as a fractional claim. Fractional claims are noted by the addition of an “F” to the claim post inscriptions. If the fractional claim has only three posts, claim tag No. 4 shall be attached to the No. 1 post in the same side as claim tag No. 1.

**IN SURVEYED TERRITORY**

A mining claim in surveyed territory is one or more legal subdivisions or parts of legal subdivisions that are available for staking. The boundaries of the claim must coincide with the legal land survey system or with the boundaries of existing surveyed land parcels. Mining claims in surveyed territory do not have to be physically staked; the Application to Record a Mining Claim in Surveyed Territory can be filed at any of the Manitoba Mineral Resources offices listed on the application form.

The fee is $67.00 per claim and is non-refundable.

**AFTER STAKING A CLAIM IN UNSURVEYED TERRITORY**

You have 30 days after the finishing date on the No. 1 post to record the claim. If the claim is not recorded in that period, the claim will not be accepted.

To record a claim, complete the Application to Record a Mining Claim in Unsurveyed Territory and file it at any Manitoba Mineral Resources office listed on the application form, with the proper filing fees. A duplicate sketch of the claim must be supplied with the application form. A claim sketch must have the following information on it (see Figure 4):

- the position of the claim in relation to topographical features and surrounding claims, if any
- the position of claim posts and the information written on each post
- the distance between claim posts on boundary lines
- the distance between claim posts and lakes, rivers, streams or other bodies of water, along boundary lines
- and the location of any major features such as buildings, roads, trails or other man made features on or near the claim

If more than one claim is staked in the same area, two copies of a composite claim sketch (see Figure 4) must be supplied with the claim applications. Each completed application can be sent or taken to any Manitoba Mineral Resources – Mines Branch office listed on the application form.

All claims can be inspected by an inspector. If problems are found, a specified length of time is given to correct them. If the problems are not corrected within the specified period, the claim may be refused or canceled.

**MINING CLAIMS**

In Manitoba, a claim must measure between 16 hectares and approximately 256 hectares whether it’s in surveyed or unsurveyed territory.
TERMS APPLYING TO ALL CLAIMS

Once the claim is recorded, it is in good standing for two years plus 60 days. If all work and reporting requirements are met, then a claim can be renewed annually for an indefinite period of time.

The complete specifications for required work, eligible expenditures, and reporting are described in Schedule B, Manitoba Regulation 64/92 (Mineral Disposition and Mineral Lease Regulation).

REDUCING A CLAIM (SURVEYED AND UNSURVEYED TERRITORY)

Claims in good standing, that are larger than 16 hectares, can be reduced anytime after the first anniversary of the claim.

To reduce a claim you must treat it as a new claim and follow the appropriate staking and recording procedures for either surveyed or unsurveyed territory. The anniversary date for the new claim will be the same as the original claim being reduced.

Remember if the application to reduce the area is made after the anniversary date, the original work commitment costs continue for the next year.

GROUPING CLAIMS

Grouping claims lets you apply work completed on a claim to any one, or more, of the claims of the same group as long as all claims are in good standing. You can, for example, apply all the credits accrued on one claim against the required work associated with several others. Another option: apply credits built-up over a number of years to specific claims within the group where activity does not meet the required level of work.

To apply, complete the Application for Grouping, include the appropriate fees and send it to any of the Manitoba Mineral Resources offices listed on the application form.

MINERAL DISPOSITION AND MINERAL LEASE TRANSFERS

Mineral disposition(s) can be transferred between individuals, companies, or individuals and companies. If the new title holder is a company, that organization must be registered to do business in Manitoba. To apply, complete a Transfer of Mineral Disposition(s) & Mineral Lease(s) Application. Make sure the various authorized agents involved in the transfer have signed the form and include a copy of excerpts from the company’s general by-laws demonstrating the signing authority of the officers involved in the transfer.

In the case of a mineral lease, the original lease document must accompany the application to transfer. Forward the application and fees to any of the Manitoba Mineral Resources offices listed on the application form.

When a corporation is transferring a mineral lease, the consent of the Minister is needed before the application to transfer is filed. To obtain consent of the Minister, forward a letter asking for the Minister’s consent to transfer the lease from the present holder to the new holder. This letter can accompany the application to transfer. The Mining Recorder will send a copy of the transfer to the new holder certifying the transfer has been recorded.

MINERAL EXPLORATION LICENSE

Applications for a mineral exploration license may be made at any time of the year. Manitoba is divided intoZones A and B. The location of your license will determine what type of license is issued.

Licenses in the two zones have different terms and conditions:

Zone A License

Size: 5,000 to 50,000 hectares excluding any prior lease or mineral disposition.

Term: Three years with an option to renew it for an additional three year term as long as the annual work requirement for each year is achieved and a statement of expenditures and a work report is submitted annually.
A license can be surrendered at any time provided the work commitment for the year in which the surrender is made has been met.

**Zone B License**
Size: 5,000 to 100,000 hectares excluding any prior lease or mineral disposition.

Term: Five years with an option to renew it for an additional five year term as long as the annual work requirement for each year is achieved and a statement of expenditures and a work report is submitted annually. A license can be surrendered at any time provided the work commitment for the year in which the surrender is made has been met.

The complete specifications for required work, eligible expenditures and reporting requirements are detailed in Schedule B, Manitoba Regulation 64/92 (Mineral Disposition and Mineral Lease Regulation).

Zones A and B are outlined on the Mineral Exploration License map along with areas where licenses cannot be applied for.

To Apply for a Zone A or Zone B license, complete the Application for a Mineral Exploration License; including the $300.00 application fee, an outline of the proposal exploration program, and a location map of the license area. Send to the Innovation, Energy and Mines offices listed on the application form.

**REDDUCING YOUR LICENSE AREA**

The size of a MEL may be reduced at any time. Advise the Director of Mines, in writing, of your plans to reduce the area of land held. Your deposit will be returned if all the required work and reporting requirements have been met. If the application to reduce the area is made after the anniversary date, the original required work costs will continue for the next year. Forward your letter of intent to reduce a license to the Manitoba Mineral Resources office.

**LEASES**

One or more leases may be obtained for the entire area covered by a claim, provided that each parcel of lease land is rectangular and its length does not exceed six times its width. A lease grants the exclusive rights to explore for, dig, work, mine, recover, procure and carry away the minerals within the lease area subject to the payment of royalties. A lease is issued for a term not exceeding ten years, and is renewable for further terms of ten years, provided regulatory requirements are met. The requirements for staking out a lease are the same as for staking out a claim.
RELATED ACTS AND REGULATIONS

The Mines and Minerals Act and Regulations
Mines & Minerals Act, M162
Manitoba Regulation 64/92 (Mineral Disposition and Mineral Lease Regulation) Provincial Parks Act, P20
Manitoba Regulation 7/91 changed to Park Activities Regulation 141/96

OTHER RESOURCES

Application to Record a Mining Claim in Unsurveyed Territory
Terms Applying to All Claims
Transfer of Mineral Disposition(s) & Mineral Lease(s) Application
Application for Grouping
Schedule B

CONTACTS

Department of Mineral Resources
Department of Conservation and Water Stewardship

Recording Office in Winnipeg:
Linda Rogoski
Acting Mining Recorder, Mines Branch
Manitoba Mineral Resources
360-1395 Ellice Avenue
Winnipeg, MB R3G 3P2
Phone: (204) 945-6527
Fax: (204) 948-2578
E-mail: linda.rogoski@gov.mb.ca

Recording Office In Flin Flon:
Dale Wride
Claims Inspector, Mining Recording Section
Manitoba Mineral Resources
201-143 Main Street
Flin Flon, MB R8A 1K2
Phone: (204) 687-1635
Fax: (204) 687-1634
Email: dale.wride@gov.mb.ca
Surveyed and Unsurveyed Territory in Manitoba
MAP 4

Land Access and Land Use for Mineral Exploration in Manitoba

Province of Manitoba
Mineral Exploration Licence Zones
FIGURE 1: STAKING A CLAIM

INFORMATION WRITTEN ON CLAIM POSTS

**CORNER POSTS**

1. number of post
2. name of claim
3. name of staker
4. time and date the post was located
5. on the No. 1 Post. time and date you finished staking the claim.

**BOUNDARY POSTS**

1. the letters 'BP'
2. name of claim
3. name of staker
4. time and date the post was located
Figure 2: Types of Claim Posts

- Tree stump made into post
- Planted post

Two types of claim posts
FIGURE 3: EXAMPLE OF A CLAIM SKETCH

All posts are inscribed as follows:

JEFF
John Smith
Time
Oct 14, 1991
Figure 4: Example of Composite Claim Sketch

Composite Sketch Showing Location of Mining Claims

Jeff 1 W 41917
Jeff 2 W 41919
Jeff 3F W 41919
GRASSROOTS EXPLORATION

Many types of exploration activities carried out by mineral exploration companies require permits. The company should contact the Department of Conservation and Water Stewardship with any questions on any permits that are required to carry out the requested activity.

AIRBORNE GEOPHYSICAL SURVEYS

Many rocks or types of mineralization have physical properties such as radioactivity that can be sensed by instruments. The airborne surveys typically measure magnetism, electrical conductivity and radioactivity over broad areas. Typically an instrument package is housed in the aircraft itself or in a “bird” trailed behind the aircraft on a cable. The aircraft can fly at elevations of a hundred metres to several thousands of metres depending on the type of survey being conducted.

Geochemical surveys can be done on several levels of intensity, from taking samples of leaf debris to digging trenches. Impacts on the environment vary depending on the level of sampling done.

Geophysical surveys test the physical properties of the rocks. These tests can include magnetism, electrical conductivity or resistivity and radioactivity. In the majority of cases this involves taking readings with instruments in a non-destructive manner. A seismic survey, although rarely done, uses explosives or vibration generating equipment to create seismic waves. Geo-phones detect the seismic waves that respond to subsurface geologic structures.

PROPERTY EVALUATIONS OR PROSPECTING

Grassroots prospecting includes activities such as examining core storage areas, conducting regional geological mapping, or surface prospecting. These activities are conducted to help plan further exploration programs.

LINE CUTTING

Lines are cut to provide a grid reference for a variety of surveys including: lease boundaries, geochemical, geological and geophysical surveys.

GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL SURVEYS

Geological mapping generally involves stripping small areas of moss or lichen and taking small hand-sized samples in order to determine the rock types present, mineralization and structural features.

Expenditures accrued as part of an airborne survey can be applied as required work on claims acquired after the survey if the survey was performed within one year prior to the date-of-issue of the Claims certificate. The amount applied to each claim is calculated according to the following formula: 

\[ \frac{4 \times A \times B}{C} = \text{total survey cost} \]

\[ B = \text{area of claims in hectares} \]

\[ C = \text{area of survey in hectares} \]
It is the responsibility of the applicant to ensure that there are no flight restrictions in the areas intended to be surveyed. Contact Transport Canada for any potential restrictions.

**LINE CUTTING**

The following are typical line cutting conditions unless otherwise approved.

a. The proponent is responsible for receiving authorization from the Department of Conservation and Water Stewardship before proceeding with work.

b. All lines are to be hand cut (e.g. hand tools and chain saws).

c. Low impact/avoidance cutting techniques shall be used. This would include removing branches from trees rather than cutting the tree, avoiding the cutting of merchantable trees where possible, etc.

d. When not accessing by foot, low impact equipment (e.g. all terrain vehicles or snow machines) shall be used and identified in the application.

e. Baselines and lease boundaries shall not exceed 2.0 metres in width and cross lines shall not exceed 1.0 metre in width. Line width and land surface disturbance shall be minimized.

f. Line widths should not exceed 1.0 metre within 100 metres of any canoe route, trail, road, cutblock, water body or water course (refer to **BMP-9 Water Crossings**). Natural features should be used to conceal visual sight of the line where possible.

g. No damage should occur to the standing timber.

h. All leaning trees are to be removed from standing timber.

i. Slash is to be laid flat.

j. There should be minimal vegetation disturbance at those locations where any line cutting enters or exits any lake or stream.

k. Felling and yarding of trees should be away from any water body. No cut brush or trees should be left on any water body during a project.

**SEISMIC SURVEY**

Conducting a seismic survey also requires additional permits from the Department of Mineral Resources. It is recommended that the proponent contact the Department of Mineral Resources to determine the regulatory requirements for the survey.

**BLASTING CERTIFICATE**

If your plans include the use of explosives, make sure a blasting certificate has been issued prior to beginning any work.

In Manitoba, companies are responsible for the training and licensing of all employees who will be doing the blasting work.

However, a description of the organization’s blasting procedures and training programs must first be submitted for approval to the Director of Mines Inspection, Department of Labour and Immigration.

Where a corporate program is not in place, an individual can apply to the Mines Inspections Branch for an individual blasting license. Should the individual have little experience, a Mines Inspector may recommend attendance at the Province’s one-day blasting course. A blasting certificate will be issued upon successful completion of a test.
STORING EXPLOSIVES

Storage facilities of up to 75 kg. of explosives on your exploration site, must meet the standards as specified in Section 79 (3) of Manitoba Regulation 228/94 (Operation of Mines Regulation), The Workplace Safety and Health Act, W210.

If over 75 kg. of explosives are to be stored on the site, then you must obtain a magazine license (see Section 78 (2) of the same regulation).

To apply for a magazine license submit your magazine plans to the Mines Inspection Branch. Your plans should include:

+ the quantity, class and division of the explosives to be stored
+ the proposed magazine construction specifications including locking devices, electrical equipment, ventilating provisions and heating devices (refer to Magazine Standards for Blasting Explosives and Detonators)
+ the proposed location of the magazine, either on the surface or underground

Once the Mines Inspector has approved the plans and the magazine has been built and approved, then a magazine license will be issued, specifying the maximum quantity of explosives to be stored, the location, and the expiry date of the license.

RELATED ACTS AND REGULATIONS

The Mines and Minerals Act and Regulations
Mines and Minerals Act, M162
Manitoba Mineral Disposition and Mineral Lease Regulation 64/92
Crown Lands Act, C340, Section 7
Fisheries Act, F90
Provincial Parks Act, P20
Fires Prevention and Emergency Response Act, P80
Forest Act, F150
Environment Act E125
Workplace Safety and Health Act, W210

Manitoba Regulation 228/94
(Operation of Mines Regulation)
Workplace Safety and Health Regulation 217/06
Employment Standards Code, E110
Highway Traffic Act, H60 - s. 1 to 167 (Parts 1 to 5)
Highway Traffic Act, H60 - s. 168 to 337 (Parts 6 to 10)
Canada Explosives Act

SEISMIC REGULATIONS

Manitoba Regulation 64/92 (Mineral Disposition and Mineral Lease Regulation)
Manitoba Regulation 228/94 (Operation of Mines Regulation)
Workplace Safety and Health Act, W210

OTHER RESOURCES

Notice of Airborne Survey form

CONTACTS

Department of Mineral Resources
Department of Conservation and Water Stewardship

Mines Inspector, Mines Inspections Branch
Manitoba Labour and Immigration
200-401 York Avenue
Winnipeg, MB R3C 0P8
Phone: (204) 945-8083
Fax: (204) 948-2209

Acting Director, Mine Safety Branch
Manitoba Labour and Immigration
200-404 York Avenue
Winnipeg, MB R3C 0P8
Phone: (204) 677-6821
Fax: (204) 677-6822
FOREST CLEARING/HARVESTING OPERATIONS

To ensure sustainable use and development of the provincial forest, care must be taken in the harvest and handling of the forest products during mineral exploration activities. Assistance in planning exploration harvest activities can be provided by contacting the Department of Conservation and Water Stewardship.

Examples of typical forest clearing activities include line cutting for geophysical surveys, development of trails/roads, work camps, and pads for drill holes and helicopters.

FOREST USE AND MANAGEMENT REGULATIONS

The Forestry Branch is responsible for issuing general permits for all work carried out within provincial forests and issuing timber permits authorizing the cutting and clearing of timber from project sites located on all provincial Crown lands.

Legislation requires forest users to practice sustainable forest management. This requires proper planning to minimize potential impacts on forest ecosystems, ensuring that forest users comply with desired forest management practices, and ensuring optimum forest resource utilization for all forest users to reduce the impact on productive forest land.

The Forest Act provides for the establishment of a Forest Management License to provide a continuous timber supply to a wood using industry. A Forest Management License, granted for a period of not more than twenty years, may be renewed for further periods. The Forest Management License describes the land upon which trees may be cut, the volume of wood that may be harvested, and other terms and conditions. There are currently two Forest Management Licenses in Manitoba. Timber management and forest renewal are the responsibilities of Manitoba Conservation and Water Stewardship on Crown Forest Land outside of Forest Management License areas where the wood is used by a facility other than that operated by the forest management licensee.

Merchantable timber typically refers to all trees capable of making at least one 5 metre piece to an 8 centimetre top diameter, inside bark. For the purposes of calculating dues and fees, merchantable timber is categorized as:

- S1 - Softwood (spruce, pine, etc.) greater than or equal to 14 centimetres in diameter
- S2 - Softwood less than 14 centimetres in diameter
- H1 - All ash, birch, elm and maple greater than or equal to 14 centimetres in diameter
- H2 - All ash, birch, elm and maple less than 14 centimetres in diameter
- H3 - All other hardwoods (aspen, etc.) greater than or equal to 22 centimetres in diameter
- H4 - All other hardwoods less than 22 centimetres in diameter

TIMBER PERMIT

To cut any merchantable timber on your exploration site, you will need a timber permit or salvage permit outlining the conditions, any special considerations, the rate to be paid (based on location and type of wood) and volume of timber to be cut. For Crown lands, this permit is issued through the district/regional Conservation office. Timber permits for other site locations, such as wildlife management areas or provincial forests, will be handled through Conservation regional offices or the specific branches.

Once the work is done, complete the declaration on the reverse side of the permit. Submit the permit to the district/regional Conservation office. You have 60 days from the
permit expiry date to apply for a refund resulting from undercutting; however, there are no refunds issued for less than $20.00. Upon receiving the Declaration of Timber Cut, the Conservation Officer will levy additional charges if you have harvested over the permit limit.

The application may be completed in-person and a permit issued the same day if the quantity to be cut is less than 300 cubic metres. If the quantity is over 300 cubic metres, the information will be forwarded to the Forestry Branch in Winnipeg for approval.

### BURN PERMIT

You will require a permit if you plan to burn any material on your exploration site between April 1 and November 15. The permit outlines those conditions that must be met, and the period of time when burning is allowed. This permit is subject to cancellation or a change of permit conditions at any time if the fire hazard increases or reaches a stage where it is no longer safe to burn. Contact the local district/regional Conservation office.

### CUTTING/CLEARING

Line cutting exploration requirements are captured in **BMP-2 Grassroots Exploration**.

Unless other methods are approved, hand clearing must be done:

- within 100 metres of a water body, unless it is a licensed facility
- through steep or unstable terrain
- within 30 metres of the shore of any water body and the trails must be doglegged and be no wider than approved by the Department of Conservation and Water Stewardship
- + areas as directed by the contact (e.g. through protected areas, specially designated areas, etc.

### GENERAL CLEARING REQUIREMENTS

a. Any clearing of vegetation should be kept to a minimum.

b. To minimize soil disturbance, clearing with heavy machinery should be limited to frozen or dry and stable ground conditions unless low impact equipment is utilized as authorized by the Department of Conservation and Water Stewardship.

c. When clearing, the organic mat should be preserved where possible. Mineral soils should not be exposed if stripping is not required for the program.

d. To limit the number of trees cut, utilize existing roads, trails and cut lines. Where possible, avoid areas covered by standing timber, and regeneration areas.

e. Leaning trees should be cut and removed. f. Existing trails are not to be blocked.

g. If required for future reclamation purposes, slash and unsalvaged timber is to be properly managed (see **BMP-14 Restoration**).

### REQUIREMENTS FOR LOGGING OPERATIONS / SCARIFICATION:

Each heavy equipment unit (skidder / slasher / forwarder / feller buncher) shall be equipped with a minimum of:

- 1 – 20 lb. ABC type fire extinguisher or equivalent
- 1 pack pump (full) or equivalent container able to hold a minimum of 20 litres of water
- 1 shovel
RELATED ACTS AND REGULATIONS

The Forest Act
Forest Use and Management Regulations
The Manitoba Timber Quota Policy
Manitoba’s Crown Timber Allocation Policy

CONTACTS

Department of Conversation
and Water Stewardship

Director
Forestry Branch
Phone: (204) 945-7998

MANITOBA CROWN FOREST AREAS CONTACT INFORMATION

Forest Management License #2
Tolko Industries Ltd.
Doug Hunt
Phone: (204) 623-8542
http://www.tolko.com/
http://www.tolkomanitoba.com/

Forest Management License #3
LP Canada Ltd.
Wade Cable
Phone: (204) 734-7703
http://www.lpcorp.com/
http://www.swanvalleyforest.ca/index.html
TEMPORARY WORK CAMPS

Temporary work camps are a necessary part of mineral exploration. Camps are to be established in an environmentally friendly manner with consideration given to the protection of natural resources.

Temporary work camps should utilize previously cleared areas or natural openings, in order to limit the amount of new clearing.

At the immediate access point to the camp, a sign must be erected showing the company name and giving a contact number. Size, additional information and design of the sign are left up to the company, but it should be easily visible to people accessing the camp.

A permit is needed to erect a facility on Crown land. The type and duration of the stay will dictate the type of permit required.

- Less than one year: covered by a Crown Land work permit.
- Longer than one year and extensive development: a Crown land General Permit required.
- Changes to type or size of camp: must be updated and approved on work permit/Crown land use General Permit.
- Provincial parks: must be approved through a Provincial Park permitting process.

For example, a camp to be established for less than one year can be covered by a work permit. A Crown land General Permit would be necessary for longer periods of time, and for more extensive development. Any changes to the type or size of camp to be located on your exploration/development site must also be updated and approved on your work permit/Crown land General Permit. In provincial parks, the location of camps and access routes must be approved through the Provincial Park permit process.

- PLAN APPROVAL

The plans and specifications for all proposed camps consisting of more than two mobile home units linked together, or any additions to an established camp must be submitted for prior approval.

- PERMITS

Camp permits are issued by the Fire Commissioners Office. As part of this process you will also need to complete the following applications: occupancy permit, building permit and plumbing permit.

- CAMP REQUIREMENTS

a. A temporary work camp cannot be established without authorization from the Department of Conservation and Water Stewardship.

b. Unless otherwise approved, the temporary work camp is to be situated no closer than 30 metres from a water body or water course.

c. A site plan indicating location of buildings, water source and sewage disposal should be submitted to the Regional Health Authority (Public Health).

d. The application must include the location of the camp, area to be used, number of occupants, and length of camp life and details of intended facilities.

e. The method used to service the camp must be included in the application (see BMP-8 Road and Trail Access). Permits from the Department of Conservation and Water Stewardship are required for docks. Dock designs
that involve infilling below the high water mark (e.g., crib docks) or that harmfully alter the shoreline or lakebed must be sent to Fisheries and Oceans Canada for their review.

e. Temporary work camp shall all times be kept in a safe, neat, and sanitary condition.

f. For the storage and handling of hazardous substances see BMP-5 Hazardous Substances, Waste and Dangerous Goods.

g. Temporary work camp permit holders are responsible for the actions of their contractors, subcontractors, agents and employees.

h. The establishment and operation of a temporary work camp shall minimize surface disturbance and environmental impacts (see BMP-3 Forest Clearing / Harvesting Operations).

i. All camp buildings must have chemical fire extinguishers.

j. A temporary work camp shall be so situated and operated that it will not pollute surface water or groundwater.

k. When camps are being decommissioned, all structures/ improvements must be removed from the site, including septic systems and latrines. All pits are to be filled in at the completion of the program.

l. Liquid waste storage must be in accordance with Department of Conservation and Water Stewardship requirements.

m. Unless otherwise approved, any sump or pit used for storing liquid waste must be a minimum of 30 metres back from the high water mark of any water body or watercourse; 7.5 metres away from occupied buildings; and 15 metres away from drilled wells.

n. Larger camps (Class A and B) and those with continual operating life of more than one season, must dispose of all liquid wastes, including sanitary sewage and waste water from showers, laundry, kitchens and cafeterias, in a disposal system acceptable to the Regional Health Authority.

p. Burning of paper, cardboard, wood products and food wastes in a burning barrel in camp may be approved under special permission from the Department of Conservation and Water Stewardship (burning permit is required during the fire season. See BMP-7 Fire Prevention and Control).

DOMESTIC WASTE DISPOSAL

If utilizing existing solid waste or liquid waste licensed facilities, authorization should be obtained from the local jurisdiction.

LIQUID WASTE

a. Disposal of liquid waste arising from food preparation, laundry, bath and latrines must not pollute groundwater or surface water. Disposal methods will depend on:

1. type of waste
2. volume of waste
3. soil characteristics iv. water table depth
4. distance from water wells, water bodies or watercourses, and other dwellings or facilities
5. remoteness of the work camp
6. seasonal considerations (i.e. frozen ground)

b. The preferred method of disposal is to dispose of liquid waste utilizing the services of a licensed septic waste hauler to an approved septic/sewage disposal site. For camps in remote areas or small, short-term camps, pit latrines and sewage pits/sumps may be used for disposal of liquid waste. The disposal method must be identified in the application.

c. Liquid waste storage must be in accordance with Department of Conservation and Water Stewardship requirements.

d. Larger camps (Class A and B) and those with continual operating life of more than one season, must dispose of all liquid wastes, including sanitary sewage and waste water from showers, laundry, kitchens and cafeterias, in a disposal system acceptable to the Regional Health Authority.
This activity is regulated and inspection by CWS. Larger systems (>10,000L/day) must be approved by Environmental Approvals Branch. All other systems must be approved by Environmental Compliance and Enforcement.

f. Any liquid waste containing heavy metals, toxic materials, flammable, explosive or radioactive substances must not be discharged to domestic liquid waste systems. Such wastes must comply with the applicable regulations, including The Hazardous Substances and Waste Dangerous Goods Regulations and The Mineral Industry Environmental Protection Regulations, 1996.

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> SOLID WASTE

a. The proponent is responsible to dispose of all solid wastes at an approved waste management facility unless otherwise directed.

b. No burying or burning of wastes is permitted.

c. In remote or isolated areas only, the burning of wood, paper products and food wastes may be approved by the Department of Conservation and Water Stewardship. All burning must be done in a controlled manner and supervised (see BMP-7 Fire Prevention and Control). Burning of some materials such as plastic, used oil, etc. will not be allowed.

d. Large non-combustible objects, including discarded equipment and empty fuel containers must be removed to an authorized disposal site.

e. For storage, locate solid waste in covered, leak proof containers.

f. Food waste should be kept in covered, fly/animal proof (e.g. bear proof garbage can) containers until removed to an approved waste disposal site.

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> DEALING WITH WILDLIFE ON SITE

Wildlife is attracted to camps by food and chemical smells associated with cooking, industrial activity and garbage dumps. They may also be attracted by an abundance of prey, and by a suitable denning or nesting habitat. They become habituated to humans occupying their territories. Conflict between humans and habituated wildlife may arise when sensitive habitats, food sources, or when humans or wildlife are threatened, injured or destroyed. Every attempt should be made to prevent wildlife from becoming habituated to humans on site.

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> FOOD STORAGE/ WASTE DISPOSAL

All waste disposal containers must be wildlife proof. Waste bins and cans must be able to keep bears, wolves and ravens, etc. out even where people are not present to scare them away.

Food waste should be removed to an acceptable dump as quickly as possible. Lingering food sources on site will greatly increase the chance of some kinds of wildlife breaching containers, reinforcing the habituation process.

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> INTERACTING WITH WILDLIFE

No wild animal should be fed. All species quickly learn to associate people with food.

Wildlife that approach or chase people at any time and approach or enter vehicles and buildings on a reported to the local conservation officer for deterrent recommendations.

Animals such as bears, wolves and coyotes that threaten and are capable of harming people and other wildlife exhibiting symptoms of a contagious disease (e.g. rabies, West Nile virus, etc.) may need to be dispatched by a Conservation Officer. If an emergency arises that requires the immediate dispatch of wildlife, a Conservation Officer must be notified of the circumstances immediately after the occurrence.

People must not attract, chase, harass or otherwise harm wildlife. Interaction between people and wildlife at camp should be avoided. Consideration must be given when bringing domestic animals into camp. It should be noted that dogs may actually attract wolves into the camp.
Each company will need to assess the liabilities associated with such an activity.

WILDLIFE DEPREDATION AND KILL PERMITS

Controlled harassment by approved means (permits issued by the Department of Conservation and Water Stewardship, wildlife branch) will help to prevent wildlife from becoming habituated to humans on site.

Designated staff at camp should be the only people carrying out controlled harassment (under a scare permit issued by the Department of Conservation and Water Stewardship).

RISK ASSESSMENT/ TRAINING

People visiting, working or residing at the camp should be given training and education about local wildlife. It is important to become aware of what wildlife species might be encountered, what kind of behavior to expect from each, and the level of risk to people. It is also important to understand the kinds of human actions and activities that can place wildlife at risk on and adjacent to site. Finally, it is important for people to be aware what is being done to reduce or eliminate conflict between people and wildlife.

MONITORING & REPORTING

Camp management should establish a reporting protocol. The Department of Conservation and Water Stewardship and camp management should collectively establish a process for determining when, and under what circumstances wildlife problems would be reported to the Department of Conservation and Water Stewardship. For further information, there are pamphlets on dealing with bears, cougars and wolves available at Department of Conservation and Water Stewardship offices, through the Ecological Protection Specialist.

CAMP REQUIREMENTS ARE:

2 – 4 Person Crew
+ 1 pack pump (full) or equivalent container able to hold a minimum of 15 litres of water
+ 1 shovel

5 – 9 Person Crew
+ 2 pack cans (full) or equivalent
+ 1 shovel
+ 1 axe

10 Plus Person Crew
+ 1 pumping unit (min 50 p.s.i.) c/w 600 feet of forestry hose and accessories
+ 3 pack cans (full) or equivalent container able to hold a minimum of 15 litres of water
+ 3 shovels
+ 2 axes

Established Camps
+ Each camp site shall have the minimum type of equipment on site
+ 1 pumping unit (min 50 p.s.i.) c/w 600 feet of forestry hose and accessories
+ 1 – 500 gallon tank wagon / water tender or equivalent (where there is no readily accessible water source)
+ 6 pack cans or equivalent
+ 6 shovels

Power Saws / Brush Saws
+ Each power saw or power hand tool kit shall be equipped with a minimum of 1 – 2.5 lb. ABC type fire extinguisher

HEALTH AND SAFETY

Health and safety measures are important in all workplaces, but they are especially relevant to mining exploration, which may expose workers to numerous hazards.

In order to ensure the health and safety of workers, those responsible for exploration must ensure that:
+ Appropriate first aid kits are readily available.
+ There is access to emergency communication.
+ All persons on camp are trained in safe working practices.
+ All pits, trenches, and excavations are made safe.
+ Explosive is used and stored safely.

RELATED ACTS AND REGULATIONS

Setting up at Project Site
Oil and Gas Act, G34
Electricians’ License Act, E50
Buildings and Mobile Homes Act, B93

CAMP/WORK PERMITS
FOREST FIRE PREVENTION

Fires Prevention and Emergency Response Act, F80, Section 29
Crown Lands Act, C340, Section 7
Provincial Parks Act, P20
Forest Act, F150

LABOUR

Workplace Safety and Health Act, W210
Employment Standards Code, E110
Construction Industries Wages Act, C190

SANITATION

Under the Environment Act, E125, Manitoba Regulations:
92/88R, Litter
83/2003, Onsite Wastewater Management Systems Regulation
150/91, Waste Disposal Grounds
Under The Public Health Act, P210, Manitoba Regulations:
321/88R, Collection and Disposal of Wastes
29/2009 Health Hazards Regulation
326/88R, Protection of Water Sources
328/88R, Sanitary Areas
330/88R, Water Supplies
331/88R, Water Works, Sewerage and Sewage Disposal
339/88R, Food and Food Handling Establishments

FUEL STORAGE

Dangerous Goods Handling and Transportation Act, D12
Manitoba Regulation 188/2001 (Storage and Handling of Petroleum Products and Allied Products Regulation)

OTHER RESOURCES

Manitoba Labour & Immigration, Workplace Safety and Health Division, Mine Safety Unit

CONTACTS

Department of Conservation and Water Stewardship
Department of Fisheries and Oceans Canada Regional Health Authorities
Fire Commissioners Office, Department of Labour and Immigration
HAZARDOUS SUBSTANCES, WASTE AND DANGEROUS GOODS

Planning the proper storage and handling of Hazardous Substances and Waste Dangerous Goods (HSWDG) products and spill mitigation plans will assist the proponent in avoiding potential environmental issues that may occur during the program. This BMP does not include the handling of solid and liquid domestic waste. For handling of these materials, please see BMP-4 Temporary Work Camps.

The Dangerous Goods Handling and Transportation Act sets out requirements for the handling and transportation of dangerous goods and hazardous waste. This Act enables the provincial government to establish standards pertaining to the generation, storage, transportation and disposal of hazardous waste.

M.R. 55/2003 adopts the federal Transportation of Dangerous Goods Regulations (TDG Regulations) for use within Manitoba’s jurisdiction. In conjunction with M.R. 282/87, criteria and lists in the TDG Regulations are used to classify hazardous waste.

M.R. 175/87 requires that generators of hazardous waste must register with Manitoba Conservation and Water Stewardship and companies transporting hazardous waste must be licensed by Manitoba Conservation and Water Stewardship.

M.R. 282/87 sets out the criteria used to determine if a particular material is regulated as a hazardous waste. The criteria are organized according to the nine major classes of dangerous goods set out in the federal Transportation of Dangerous Goods Regulations (TDG Regulations). With certain exceptions, hazardous waste may generally be described as “waste dangerous goods”. As part of the process in determining whether a waste material is regulated as a hazardous waste, M.R. 282/87 refers to the list of dangerous goods in the TDG Regulations.

The following are examples of materials as characterized under different headings in the HSWDG Regulations:

Non-hazardous Substances: Tires, culverts, core boxes, untreated wood, Portland cement, biodegradable drill muds

Industrial Hazardous Substances: Petroleum products, petroleum containers and filters, pesticides, paint, acids and bases, inorganic substances such as ammonia and fertilizers, metals such as lead, copper sulfate, sodium chlorite

Acute Hazardous Substances: Chlorine, fluorine, and potassium

Environmentally Persistent or Chronic Hazardous Substances: Substances such as mercury, some drilling additives, lead, arsenic and cyanide

Waste Dangerous Goods: Used oil, used oil filters

➤ TYPES OF HAZARDOUS SUBSTANCES ACCORDING TO HSWDG REGULATIONS:

In accordance with the Generator Registration and Carrier Licensing Regulation, a generator of hazardous waste must register with Manitoba Conservation and Water Stewardship when:

(a) hazardous waste is generated at the premises in a quantity equal to or greater than the quantity specified in the Schedule to the Regulation (Table of Reportable Quantities) - the reportable quantity is generally 5L per month for liquid waste or 5 kg per month for solid waste but, depending on the dangerous goods classification of the waste, it varies from 1L or 1kg to 50L or 50kg, or
(b) solid hazardous waste in a quantity of 5kg or more, or liquid hazardous waste in a quantity of 5L or more (or liquid or solid waste that contains more than 500g of PCB mixture) is to be removed from the premises where it was generated.

HAZARDOUS WASTE REGISTRATION FORM

Generators of hazardous waste must register with Manitoba Conservation and Water Stewardship and report the types and quantities of hazardous wastes generated at each site. The Hazardous Waste Registration Form is used for the initial registration, to update the registration and/or provide a supplementary report (for example, to report additional wastes).

APPLICATION FOR A LICENSE TO TRANSPORT HAZARDOUS WASTE

Carriers of hazardous waste must possess a carrier license issued by Manitoba Conservation and Water Stewardship. This license is issued to the company that is the transporter of the waste (each driver must have training in accordance with the federal Transportation of Dangerous Goods Regulations).

APPLICATION FOR A LICENSE TO RECEIVE HAZARDOUS WASTE

A facility that receives hazardous waste from offsite must be approved by Manitoba Conservation and Water Stewardship in accordance with The Dangerous Goods Handling and Transportation Act. To apply for a license for the construction and operation of a hazardous waste management facility, a Dangerous Goods Handling and Transportation Act Application Form must be completed. The completed application form and supporting information should be sent with a covering letter to the Director of the Environmental Approvals Branch. A cheque for the application fee of $250 (payable to the Minister of Finance) must accompany the application.

HSWDG MANAGEMENT

The applicant must indicate:

- all HSWDG receptacles stored on site
- the type of product stored
- the volume of each
- the location of each storage site
- whether the tanks are portable (skids, trailer, etc.) or fixed.

There may be requirements under HSWDG regulations to register and approve the storage facility based on the volumes, products and storage receptacles.

Applicants should follow the storage and handling procedures listed below for all volumes to minimize environmental risks and meet HSWDG regulation requirements.

- The soil type, terrain, ground water table, surface water and water wells in the storage area(s) must be identified and assessed prior to site selection in order to limit the extent of contamination from any possible spills.

- Locate all tanks (including slip tanks, mobile, and permanent tanks) away from traffic-congested areas. HSWDG storage must be located a minimum of 100 metres from any water body or watercourse, unless otherwise approved. Occupational Health & Safety (OH&S) legislation requires that fuel must be stored a minimum of 6 metres from any building and there must be a 30-metre minimum clearance from the fuel dock to...
The Fire Commissioners Office and National Fire Code require at least two 2A-10BC fire extinguishers to be on site at fueling areas.

c. Inspect and maintain all storage tanks. There should be no signs of corrosion and tanks must be painted, if applicable.

d. Each fuel storage tank should have two shut-off valves, one of which may be the handle.

e. Unless otherwise approved, secondary containment of all HSWDG materials is required (e.g. an enviro-tank, a dike lined with an impermeable membrane resistant to the product being stored, and spill containment trays). Construction requirements for secondary containment are available from the Department of Conservation and Water Stewardship.

f. For each storage area, secondary containment is required. For a storage area containing a single drum, containment must consist of 110 per cent of the volume. For a storage area containing multiple drums, containment must consist of 10 per cent of the cumulative volume plus 100 per cent of the volume of the largest container.

g. Use drip pans and/or nozzle holders to contain drips or spills. Nozzles should be mounted above the drip catchments.

h. Ensure slip tanks (tidy tanks) are secured into the vehicle. The intent is that in the event of a roll over, a full slip tank will stay secured in the truck.

i. Inspect fuel pumps and other equipment for worn hoses and leaks. Repair equipment when required.

j. Companies are required to have spill kits on site (number depends on the program, i.e. work camp, drill site, pump shacks). A large spill kit has an absorbent capacity of approximately 120 liters and a small spill kit has an absorbent capacity of approximately 20 liters.

k. Any water intake equipment must have secondary containment/spill kits for both the pump and pump fuel supply.

l. Refueling on ice or water, or within 100 metres of water, is permitted provided secondary containment of the tank and spill kits are used. HSWDGs are to be stored 100 metres from a water body or watercourse when not required for fueling equipment.

m. Toxic chemicals must be stored securely.

n. Neutralizing materials must be stored adjacent to acids.

o. Lubricants and oily substances should be removed and properly disposed of, prior to sump water disposal.

5. New oil containers must be taken to a receiver and not discarded in landfills.

6. Oil filters are a waste dangerous good and must not be discarded in landfills. Place in a drum and transport to an approved receiving site. Used oil consignees will generally also take filters and oil containers.

7. Batteries and any waste dangerous goods other than waste oil or antifreeze may be stored on site up to 100 kilograms combined aggregate.

8. Used oil or waste antifreeze may be stored on site in containers (up to aggregate capacity of 500 liters). Disposal must be to an approved receiver.

9. Any use of, storage of, or transportation of explosives requires a provincial permit and may also require federal approval.

SPILL CONTINGENCY PLANNING

The applicant is required to have appropriate equipment/absorbent material on hand for the cleanup, containment and storage of contaminated materials and this equipment/absorbent material shall be readily available in areas where spills could potentially occur.

Mandatory reporting of environmental accidents in Manitoba is required by regulation. This regulation refers
to essentially the same reportable quantities of regulated, listed products as The Federal Transportation of Dangerous Goods Act, and The Canadian Environmental Protection Act, (with some more stringent variations). The provincial regulation also looks at the reporting requirements for other non regulated environmental contaminants.

The Manitoba Environmental Emergency Response Team operates under the authority of The Dangerous Goods Handling and Transportation Act. This Act gives Environment Officers and Inspectors special powers in emergencies to enter any land or building, control and clean up releases, and take any emergency actions required to protect persons, property, and the environment. When necessary, specialized expertise from any of the Department’s program areas may be called out to assist in the response to an environmental accident. The response team has access to all of the resources of the provincial government and, through agreement, the resources of the federal government as well.

The active team consists of twelve Environment Officers from Manitoba Conservation and Water Stewardship. Fourteen provincial regional Environment Officers located throughout the province are also trained to be part of the Department’s response system.

The Manitoba Emergency Plan identifies Manitoba Conservation and Water Stewardship as the lead provincial agency for dangerous goods incidents.

If a spill occurs, company personnel must take the following steps when safe to do so:
  a. prevent further spillage
  b. contain the spilled material;
  c. minimize the effects of the spill
  d. restore the area affected as near as possible to its previous condition

The Department of Conservation and Water Stewardship may request soil samples from the contaminated site and analysis of the samples following cleanup activities.

HSWDG contaminated soils and clean up materials must be properly stored on site and then sent to an appropriate or approved disposal facility.

All spills of any quantity are to be documented in the Closure Report by recording the date, location, type of spill, reason for spill, and cleanup action taken.

It is important to note that in all instances of spills or in the discharge of pollutants The Environmental Spill Control Regulations and/or The Environmental Management and Protection Act, 2002 are the applicable legislation, whether or not HSWDG regulations apply.

### RELATED ACTS AND REGULATIONS

- Transportation of Dangerous Goods Regulations
- Generator Registration & Carrier Licensing Regulation
- Dangerous Goods Handling & Transportation Regulation
- Environmental Accident Reporting Regulation

Other Resources Hazardous Waste Program:

Hazardous Waste Registration Form [en français]
Guide to Completing the Generator Registration Form
Application for a License to Transport Hazardous Waste
Guide to Completing the Application for a License to Transport Hazardous Waste

Dangerous Goods Handling and Transportation Act Application Form

Canadian Environmental Protection Act (CEPA)
Interprovincial Movement of Hazardous Waste Regulations
Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations
CONTACTS

Department of Conservation and Water Stewardship
Department of Labour and Immigration
Transport Canada
Environment Canada
Hazardous Waste Program
Director
Environmental Approvals Branch
Manitoba Conservation and Water Stewardship
160-123 Main Street
Winnipeg, MB R3C 1A5
Fax: (204) 945-5229

Offices of Manitoba Conservation and Water Stewardship:
BRANDON:
1129 Queens Ave.
Brandon, MB R7A 1L9
Phone: (204) 726-6064

THE PAS:
PO Box 2550, Provincial Bldg.
The Pas, MB R9A 1M4
Phone: (204) 627-8499

DAUPHIN:
27-2ND Ave. S.W.
Dauphin, MB R7N 3E5
Phone: (204) 622-2030

STEINBACH:
Box 2019, Unit 5-284 Reimer Ave.
Steinbach, MB R0A 2A0
Phone: (204) 346-6060

LAC DU BONNET:
Lac du Bonnet Health Centre
PO Box 4000
Lac du Bonnet, MB R0E 1A0
Phone: (204) 345-1444

SELKIRK:
Lower Level, 446 Main Street
Selkirk, MB R1A 1V7
Phone: (204) 785-5030

THOMPSON:
Provincial Bldg., 59 Elizabeth Drive
PO Box 32
Thompson, MB R8N 1X4
Phone: (204) 677-6703

WINNIPEG:
Suite 160, 123 Main Street
Winnipeg, MB R3C 1A5
Phone: (204) 945-7100

PORTAGE LA PRAIRIE:
25 Tupper Street North
Portage la Prairie, MB R1N 3K1
Phone: (204) 239-3206
FUEL HANDLING AND STORAGE

Petroleum-based fuels and lubricants represent hazardous substances used by exploration programs that present significant risks associated with occupational health and safety and environmental impacts. All petroleum products present obvious fire hazards. Additionally, all have the potential to degrade the environment through contamination of water and soils and thereby place local plant and animal life at risk. Given the risks of fire and spills, it is important to have emergency response plans in place to adequately deal with these, should they occur.

Petroleum products continue to pose a risk of contamination to groundwater and soil. Contamination can occur from large spills or from small leaks and spills over a long period. The effects can be experienced through drinking water contamination, other public health issues, public safety concerns. Most jurisdictions have specific and detailed regulatory requirements for the handling and use of petroleum products. It is the company’s responsibility to be aware of those that apply to its work, and to abide by them. However, good practice involves minimizing the potential for fire or spills and the development and implementation of procedures to address spills and accidents. In the subsections following, there are guidelines to lowering the risk of fires or spills in the storage, transport, and handling of fuels and petroleum products.

Use petroleum products only for their intended purpose and as recommended by the manufacturer.

Products covered here are those most common to exploration activities, which include:

- Gasoline
- Jet fuels and kerosene
- Diesel
- Lubrication oils
- Transmission oils
- Hydraulic oils
- Waste oils

Propane and other liquefied gases are covered in a BMP - 5 Hazardous Substances, Waste and Dangerous Goods.

With respect to their fire hazard, all fuels and petroleum products must be handled with care. Never permit smoking or any work with open flames in their presence. There are differences in the potential for fire hazard between different fuels and petroleum products, and they are divided into flammable and combustible groups with each group divided into sub-classes. (Note that in some English usage, and in French and Spanish usage, “inflammable” is the same as “flammable”). These divisions are based on the flashpoint - the flashpoint is the lowest temperature at which the vapour above a liquid can be ignited in air. The divisions are:

Flammable. These are termed Class I liquids and have a flashpoint below 37.8 oC. They are further sub-divided into Class IA, Class IB, and Class IC liquids, depending on boiling points. Class IA liquids are the most hazardous, with boiling points below 37.8 oC (e.g., propane). Class IB liquids have boiling points above 37.8 oC, and of these the most important to explorationists is gasoline. Class IC liquids have higher boiling points and are mostly alcohols of little concern to exploration.

Combustible. These have a flashpoint above 37.8 oC and are further divided into Class II and Class III liquids. Class II liquids have flashpoints between 37.8 oC and
60 °C and include diesel, fuel oil, jet fuel, and kerosene. Class III liquids have flashpoints above 60 °C and include ethylene glycol antifreeze.

STORAGE OF FUELS AND PETROLEUM PRODUCTS.

Almost all exploration projects require some fuel storage, whether it is a few cans of oil, or large tanks of diesel to support a drill program. The greatest hazard in storage is fire or explosion, so never store fuel or oil in tanks or containers exposed to the air where the temperature could rise to the liquid’s flashpoint. Always place ample warning signs against smoking or using any open flames in or near storage areas.

The most likely hazard is not fire, but spillage of fuel or oil. This risk can be mitigated by following good fuelling procedures, using well-designed tanks, and building containment areas to prevent a major spill from escaping the storage area. The first step in fuel and oil storage is selecting the site. Locate storage areas at least 100 m from:

+ A flood area or high-water line
+ Power lines
+ Public roads
+ The recharge area of a water well

Locate the storage area closer than 100 m to the water, if it is intended to supply boats or float planes. However, the storage area still must be above the high-water mark. Choose a storage site with:

+ Low traffic and a buffer zone from traffic
+ A slope of not more than 5%
+ Minimal dead vegetation, grass or other combustible material that could present a fire hazard

Storage Tanks Selection

Generally speaking, for exploration programs there is no need to bury storage tanks, so they can be set up above ground. All storage of petroleum product and allied product in containers 230 L and greater must be in compliance with the Storage and Handling of Petroleum Products and Allied Products Regulation, M.R. 188/2001 (the Regulation) pursuant to the Dangerous Goods Handling and Transportation Act.

Aboveground tanks greater than 230 L and less than 5000 L are subject to partial application of Regulation, as per Section 3 of the Regulation. Aboveground tanks must be ULC certified and must have approved secondary containment.

UN certified Intermediate Bulk Containers (IBC) meet Transport Canada’s requirements for transportation of a product, but may not be suitable for storage of the product at a facility or operation. Contact Transport Canada for further information on transporting dangerous goods. Ensure that storage tanks are:

+ Double-walled if available (particularly in wet climates)
+ Vented according to manufacturer design
+ Not thin-skinned or plastic bladders
+ Protected from corrosion with paint and sealant
+ Marked to show contents and capacity

Aboveground storage tanks must have secondary containment provided in the form of a double walled tank, or a single walled tank installed within approved secondary containment.

TRANSPORTING FUEL AND PETROLEUM PRODUCTS

The greatest chance of a serious fire or uncontrollable spill exists from even a minor accident, when transporting fuel or oils. The best preventive measure is to use well-trained and rested drivers. Some additional precautions to observe are:

+ When moving small amounts of fuel or oil, use only portable tanks or cans that are made of metal or approved plastic, which have tight closures with screw or spring covers, and which are equipped with spouts or other means to allow pouring without spilling
+ Never use leaking tanks or containers to transport
fuel or oil
+ Secure fuel tanks to prevent slipping or rotating, or fuel tanks being jarred loose
+ Place fuel tanks and cans on the vehicle so as to minimize the chance that an impact would cause them to rupture (e.g. do not mount a gas can on the rear of a vehicle)
+ Make sure that if a fuel can is placed in a compartment on a vehicle, that the compartment is vented
+ Place tanks and cans with fuel in locations on the vehicle where there is minimum exposure to heat
+ If it is necessary to place the fuel container near an engine or exhaust system, shield the container against the heat

> HANDLING FUELS AND OILS ON WATER

Since any spillage of fuel or oil is difficult to contain when working on water or ice, it is necessary to take special precautions in these situations. When drilling on ice:

+ Park vehicles and equipment off the ice if possible
+ If parking on the ice, place oil absorbent mats below each vehicle
+ Make daily inspections for leaks and spillage

When drilling from a barge:

+ Have a company representative who is capable of dealing with a spill, present during refuelling or oil changes
+ Transport fuel to the barge in clean, sealed containers on a service vessel capable of containing any spill
+ Transfer fuel to the barge using a hose enclosed within another hose
+ Make sure the barge has a “lip” and collection tanks, to prevent fluids on deck from escaping into the water
+ Store fuel below decks or in double-walled tanks
+ Anchor an oil absorbent boom around the barge at all times
+ Have the boom towed by a separate boat and readily available during moves

Refueling on ice or water, or within 100 metres of water, is permitted provided secondary containment of the tank and spill kits are used. HSWDGs are to be stored 100 metres from a water body or watercourse when not required for fueling equipment.

To increase protection of the environment, the Manitoba government replaced the former legislation regulating the storage and handling of petroleum and associated products on December 17, 2001. The Regulation is entitled the Storage and Handling of Petroleum Products and Allied Products Regulation (MR188/2001).


Dangerous Goods Handling and Transportation Act, D12 Manitoba Regulation 188/2001 (Storage and Handling of Petroleum Products and Allied Products Regulation)
FIRE PREVENTION AND CONTROL

Mineral exploration, as with any activity in the bush, has the potential to start a forest fire or have program operations affected by a forest fire or fire suppression activities. Manitoba averages approximately 544 wildfires every year, many of which threaten homes, businesses, farms or industrial installations. Fire is a natural element in any forest or grassland. Like storms, avalanches and floods, it is a powerful force of change in nature. To reduce potential liability concerns, the mineral industry must take every precaution to prevent a forest fire or to suppress a fire if one originates from their activities.

The boreal forest is a fire prone environment and it is important to consider this fact when developing and equipping exploration camps. Managing potential ignition sources, having the required training and equipment to deal with a wildfire and following some basic FireSmart principles can significantly reduce wildfire risks.

For safety and fire suppression reasons the Department of Conservation and Water Stewardship may need to contact the applicant without delay to know where the field crews and equipment are located. In extreme cases the Department of Conservation and Water Stewardship may recommend the evacuation of a site because of the potential threat from wildfire.

Operators should be aware that under The Wildfires Act anyone who causes a fire may be responsible for the costs associated with suppression activities.

The operation must have a means of reporting a forest fire from the work site.

▶ BURN PERMIT – FROM REGIONAL CONSERVATION OFFICE

You will require a permit if you plan to burn any material on your exploration site between April 1 and November 15. The permit outlines the conditions that must be met, and the period of time when burning is allowed. This permit is subject to cancellation or a change of permit conditions at any time if the fire hazard increases or reaches a stage where it is no longer safe to burn. Contact your District Conservation office to obtain a permit. Open fires are not allowed. Only approved fire pits may be used. If an approved fire pit is unavailable you must use a camp stove.

In an emergency, a person may, without a burning permit, start an outdoor fire for the purpose of cooking, keeping warm or signalling for help. Sec 19 (5) The Wildfires Act.
EQUIPMENT

All operations require firefighting equipment to be on site in a readily accessible area and serviceable during the fire season. All water packs and pails to be kept full of water during the fire season. This equipment is to only be used for fire fighting.

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<tr>
<th>TOOLS</th>
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<th>6 - 10 PEOPLE</th>
<th>11 - 20 PEOPLE</th>
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<td>PULASKI TOOL (Axe/grub hoe combination)</td>
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TOOLS NEEDED FOR FIRE PREVENTION

Camp Burning Barrels

+ All burning must be done in a controlled manner; in a burning barrel equipped with an eight to 16-millimetre grated top to help prevent the escape of burning embers.
+ The burning barrel should be placed on a cement pad or mineral soil, be surrounded by a metre wide strip of mineral soil and be at least 3 metres from any flammable material.
+ Fires must always be attended until they are completely out.
+ The burning location must be equipped with fire fighting tools, such as a shovel, a chemical fire extinguisher and a full water pack.
RELATED ACTS AND REGULATIONS

Fires Prevention and Emergency Response Act, P80
The Wildfires Act
The Fires Prevention and Emergency Response Act

OTHER RESOURCES

Fire Commissioners Office: http://www.firecomm.gov.mb.ca/
FireSmart Manual (PDF File)

CONTACTS

Director
Environmental Approvals Branch
Manitoba Conservation and Water Stewardship
160-123 Main Street
Winnipeg, MB R3C 1A5
Fax: (204) 945-5229

Toll free line to report a forest fire: 1-800-782-0076

Department of Conservation and Water Stewardship
Contact the local district/regional Conservation office
ROAD AND TRAIL ACCESS

Roads and trails are one of the most visible impacts of exploration activities. They open up areas to other resource users that may not have been accessible previously.

Trails and roads create more controversy than other mineral exploration activities. Exploration companies must be allowed to access their claim areas.

All potential routes are to be considered and proposed during route selection. Each route will be assessed according to its ability to meet the goals and objectives of both the applicant and the Department of Conservation and Water Stewardship. Applicants should review options and consider future operations to avoid development of a network of access trails.

The applicant should consider the impact on wildlife populations from access into an area (program timing to protect critical wildlife breeding, nesting or survival periods, the destruction or fragmentation of wildlife habitat, etc.).

New access development may be prohibited where reasonable access already exists. Where applicable, the applicant should consider access utilizing frozen water bodies or courses in order to minimize the impacts on terrestrial environments. Discretion in development of the road or trail may be allowed as long as the development addresses the concerns of the sensitive nature for the area.

Areas that may have sensitivities:
+ areas of critical or sensitive wildlife habitat (e.g. riparian zones, etc.)
+ areas where activities will result in unstable soil or erosion problems
+ sites of religious, archeological, historic, aesthetic, paleontological, natural or cultural significance
+ legislated protected areas (game preserves, Provincial Parks and protected areas, Representative Area Network lands, land use planning areas, wildlife lands, ecological reserves, etc.)

For clearing operations, refer to BMP-3 Forest Clearing / Harvest Operations.

The applicant will identify potential constraints to trail development, such as construction practices, land use planning, seasonal timing, community issues, etc.

Areas requiring access restrictions will require specific mitigation actions such as gates, berms, barricades, roll back, etc.

Closure or reclamation of roads and trails must be part of the reclamation plan. See BMP-14 Restoration.

The construction schedule must be provided prior to route selection in the work permit application. Seasonal restrictions may apply. The applicant must identify other known resource users who may be accessing the trail or are impacted by trail development.

Life expectancy of all access routes should be identified in the application to allow for better access management for the area.

Fills and cuts resulting in damage to the ground surface should be kept to a minimum.

For winter access, the applicant should consider snow / ice in lieu of soil for cuts and fills.

If fill materials (sand, gravel, till, etc.) are required for trail improvement, a separate authorization is required from the Department of Conservation and Water Stewardship.
Vehicles and equipment must be confined to the identified access right of way unless otherwise approved. Trail centerlines should be flagged prior to trail construction to avoid unforeseen problems. Routing should avoid long straight sections and incorporate curves to reduce the length of sightlines. Road/trail access points from well-travelled roads should be routed in a manner that does not create a long initial sightline.

Activities should occur on dry, stable, or frozen ground conditions. While using undeveloped access routes during wet conditions, all efforts must be made to minimize rutting of the ground surface. Rutting is defined as an area 5 metres in length and 10 centimetres in depth.

For access using water bodies or watercourses, see BMP-9 Water Crossings.

When crossing bogs, muskegs or possible wet areas, the ground must be frozen sufficiently to support equipment. If frozen ground conditions do not exist, alternate and approved methods by the Department of Conservation and Water Stewardship, must be used to prevent rutting of the ground surface (e.g. matting, corduroy, planks, etc.).

Access trail routes and widths must be identified in the application and will be limited to:

- the equipment size
- method of construction
- the intended purpose of the trail
- Department of Conservation and Water Stewardship approval

Unless otherwise approved, clearing of vegetation within 100 meters of any watercourse or water body must be hand cleared. Within 30 meters of the shore of any water body or watercourse, the trails must be hand cut, doglegged and be no wider than approved by the Department of Conservation and Water Stewardship.

An easement application or lease application must be submitted and approved for any long-term development of a roadway. Exclusive use dispositions will not be granted for mineral exploration activities.

When sand or gravel is required for upgrades to a road or trail, a permit will be required. The mineral exploration coordinator can deal with small quantities permits.

When access onto a Provincial Road or Highway is required, construction of an approach must be approved by the Department of Infrastructure and Transportation.

Any roads/trails that were re-opened to access the proposed work area(s) must be closed and returned to the original condition at the conclusion of the program unless otherwise authorized.

### EQUIPMENT

**Road Construction**

Each heavy equipment unit (crawler tractor, excavator, skid steer loader, graders) shall be equipped with a minimum of:

- 1 – 20 lb. ABC type fire extinguisher or 2 – 10 lb. ABC type fire extinguishers
- 1 shovel

**Haulage Trucks**

Each truck engaged in log / gravel haulage shall be equipped with a minimum of:

- 1 – 5 lb. ABC type fire extinguisher
- 1 shovel

**Service / Utility Vehicles**

Each service / utility vehicle such as pick-ups or fuel tenders shall be equipped with:

- 1 – 5 lb. ABC type fire extinguisher

### RELATED ACTS AND REGULATIONS

Highways Protection Act, H50
Highways and Transportation Act, H40

### CONTACTS

Department of Infrastructure and Transportation
Phone: (204) 945-5658
Highway Traffic Board  
Phone: (204) 945-8912

Provincial Trunk Highways  
To apply for any required permits contact the  
Highway Traffic Board.  
Phone: (204) 945-8912

Provincial Roads  
To apply for any required permits or if you need further direction on the guidelines or information on a specific route, contact the Department of Infrastructure and Transportation.

If you are working in a Conservation area, a work permit for road upgrades or new construction is required. Your first contact should be the closest Conservation district/regional office.
WATER CROSSINGS

The constructions of water crossings and of water body access points are activities that may have significant impacts on aquatic environments. Water crossings are commonly used by the mineral exploration industry to efficiently access program work sites. Temporary water crossings are employed for short-term access and are not intended for prolonged use. The impacts associated with water crossing construction will depend on the type of structure used at the crossing, timing of the proposed work and on how the crossings are constructed, maintained and operated.

The Department of Fisheries and Oceans Canada (DFO) is responsible for protecting fish and fish habitat in all water bodies and watercourses across Canada. As per The Fisheries Act, 1985, no one may carry out work that will cause or has the potential to cause the harmful alteration, disruption or destruction to fish habitat without prior approval from DFO.

The Fisheries Act requires that projects avoid causing serious harm to fish unless authorized by the Minister of Fisheries and Oceans Canada. This applies to work being conducted in or near waterbodies that support fish that are part of or that support a commercial, recreational or Aboriginal fishery. To protect fish and fish habitat, efforts should be made to avoid, mitigate and/or offset harm. Following the measures to avoid harm will help you comply with the Act. (http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html)

The impacts associated with the construction of access points will depend on the access location selected (i.e. type and amount of shoreline/bank vegetation, shoreline/bank slope at the land/water interface, degree of disturbance required to construct the access point, soil type, type/amount of aquatic vegetation, etc.), timing of construction, type of heavy equipment used, required width of access, etc.

The program impacts may include:
- the harmful alteration, disruption or destruction of fish or aquatic habitat through the infilling of watercourses or water bodies or the alteration of shoreline areas
- the blockage of fish movements
- dewatering of small streams during water withdrawal activities
- the entrainment or impingement of small fish into water intakes
- the introduction of deleterious substances, such as fine sediments, into a water body or watercourse

The potential impacts on fish habitat and the surrounding land may be minimized through careful planning of the routes of the access trails and roads and the selection of appropriate crossing sites, crossing structures and water body access points that will have minimal impacts on the aquatic environment.

The Manitoba stream crossing guidelines for the protection of fish and fish habitat outline procedures for minimizing damage when using water crossings in mineral exploration. The Manitoba Water Strategy also details water protection practices that are relevant to water crossings.

Water crossings should be minimized, but if needed they should be crossed at right angles to minimize the area of disturbance. In order to minimize disturbance one should also:
- Try to cross at narrow stream sites.
- Avoid any banks that are fine or unstable.
Properly planned water crossings and use of frozen water bodies for travel can reduce potential impacts on terrestrial and aquatic ecosystems. Types of structures used to cross waters may include steel or wooden bridges, culverts, ice/snow bridges or ramps.

If practical, water crossings should be located:
+ near the headwaters of watercourses
+ away from water body inlets and outlets
+ upstream from natural, permanent barriers to fish passage, such as waterfalls and steep gradients
+ away from important fish habitat (such as riffle area, rapids, and areas with gravel/cobble substrates)
+ where the approaches to the crossing are on a flat, stable slope
+ in areas with minimal or no floodplain habitat adjacent to the active channel
+ perpendicular to the watercourse
+ at the location where the watercourse is narrowest (these areas may have fast moving water, thin ice, and may not be the best place to create a crossing)
+ where they will accommodate peak flows

It is important to prevent erosion of the watercourse bank at the crossing point. Silt fencing or other erosion barriers such as straw bales may be necessary to prevent siltation/erosion.


http://www.small-house-building.com/site-foundation/construction-site-erosion-control

For open water crossings, clear span structures that do not involve any infilling of the watercourse below the high water mark are the preferred type of structure. Infilling of the watercourse below the high water mark is considered a loss of habitat and may require formal authorization from DFO under Section 35 (2) of The Fisheries Act and acceptable compensation to meet DFO’s No-Net–Loss of Fish Habitat Policy.

Ice/snow bridges are the preferred type of crossing for winter exploration programs.

The Department of Fisheries and Oceans Canada is responsible for protecting fish and fish habitat in all water bodies and watercourses across Canada as per The Fisheries Act, 1985.

RELATED ACTS AND REGULATIONS

Province of Manitoba Acts
Environment Act, E125
Public Health Act, P210
Workplace Safety and Health Act, W210
Mines and Minerals Act, M162
Mining and Metallurgy Compensation Act, M190
Provincial Parks Act, P20
Manitoba Regulation 7/91 changed to Park Activity Regulation
Government of Canada
Canadian Environmental Protection Act
Fisheries Act
Canada Wildlife Act
Proposed Federal Endangered Species Protection Legislation
OTHER RESOURCES

Manitoba Stream Crossing Guidelines for the Protection of Fish and Fish Habitat
Policy for the Management of Fish Habitat - Federal Department of Fisheries and Oceans

Manitoba Surface Water Quality Objectives (MSWQO)
Recommended Buffer Zones for Protecting Fish Resources in Lakes and Streams, in Forest Cutting Areas

CONTACTS

Department of Conservation and Water Stewardship
Department of Fisheries and Oceans Canada
Trenching and hydraulic stripping are the most definitive methods for surface exploration, but can cause significant environmental disturbances, with the potential for contamination of soil and water through exposure of mineral substances.

**Environmental impacts can be reduced or avoided with the proper safeguards.**

Hydraulic stripping is rarely used as a primary exploration tool, but could be used in conjunction with other exploration activities (e.g. trenching, diamond drilling).

There are two types of trenches:

**Overburden Trenches**  
Overburden trenches are made to check and map the type of bedrock below the overburden. These are very common if heavy equipment (i.e. back hoe) is available.

**Bedrock Trenches**  
Bedrock trenches are made to follow up on bedrock mineralization. These require blasting with dynamite and are far less common. While the former are usually backfilled immediately, the latter are usually left open.

The Department of Mineral Resources accepts trenches (by volume removed) as evidence of assessment work, which is one of the reasons they are not backfilled. Most of the overburden trenches are dug where the ongoing operations require them and the location is not something known in advance.

**EXPLORATION TRENCHING**

a. The Department of Conservation and Water Stewardship must approve all trenching activities. Details of the trenching activities must include the dimensions of the trenches and the method of construction. If clearing of forest vegetation is required, see BMP-3 Forest Clearing /Harvesting Operations.

b. Unless authorized, a minimum 100-meter buffer of undisturbed vegetation must be maintained between the trenches and all water bodies and watercourses.

c. Unless otherwise approved, all areas stripped of topsoil must be back filled and restored to as near the original contour as possible.

d. The development of an exploration trench must take into consideration the safety risks associated with entrapment. Trenches must be dug in a manner that allows for easy escape, for both humans and wildlife.

e. For the use of explosives, see BMP-5 Hazardous Substances, Waste and Dangerous Goods.

f. Topsoil, if present, and material removed from trenches must be stockpiled separately and utilized for site restoration unless otherwise approved.

g. Material excavated from overburden trenching must be backfilled with the topsoil replaced last.

h. All precautions should be taken to prevent the siltation of local watercourses. Silt fencing or other erosion barriers, such as straw bales, should be used to control water movement away from the area excavated. See BMP-9 Water Crossings.

h. Applicant liabilities, future reclamation costs and future planning should be considered by the applicant when requesting trenches be left open. See BMP-14 Restoration.
HYDRAULIC STRIPPING

a. All hydraulic stripping operations must be approved prior to initiation. Contact the Department of Conservation contact regarding projects using hydraulic stripping. Restoration options should be discussed with the regional Conservation Officer - refer to BMP-14 Restoration. If clearing of forest vegetation is required see BMP-3 Forest Clearing / Harvesting Operations.

b. All hydraulic stripping operations must be approved prior to initiation. Details of the stripping activities must include the dimensions of the area to be affected. If clearing of forest vegetation is required, see BMP-3 Forest Clearing / Harvesting Operations.

c. Hydraulic stripping has the potential to cause significant environmental impacts of water courses. Unless otherwise authorized, a minimum 100-meter buffer of undisturbed vegetation must be maintained between stripping operations and any water body or watercourse. Mitigation measures must be taken to prevent run off from hydraulic stripping operations do not enter any water course.

d. Water intake hoses must be fitted with screens that meets DFO’s 1995 Freshwater End-of-Pipe Fish Screen Guideline to prevent the impingement or entrainment of fish during pumping activities.

e. Restoration options should be discussed with the regional Conservation Officer, refer to BMP-13 Restoration.

CONTACTS

Department of Conservation and Water Stewardship

RELATED ACTS AND REGULATIONS

The Mines and Minerals Act, M162
Manitoba Mineral Disposition and Mineral Lease Regulation 64/92
Crown Lands Act, C340, Section 7
Provincial Parks Act, P20
Forest Act, F150, Sections 20(3), 23(1) and 28 for Management and Transportation; Sections 9 to 11 for core storage
Environment Act, E125 and Regulations
Drilling is one of the most definitive and common methods for surface exploration. A properly planned and managed drilling program reduces the risk of impacting the environment.

Drilling in the Western Sedimentary Basin requires additional precautions because of the potential of encountering oil and gas concentrations.

Clearing for drilling is dependent on the size and type of drill rig used.

The following requirements apply to shield areas of the province:

**Drilling (Precambrian)**
A license is not required to drill in Precambrian terranes, but there are requirements governing the operation and abandonment of holes and sites as described in The Mines and Minerals Act, Manitoba Regulation 63/92 (Drilling Regulation).

**Drilling (Phanerozoic)**
To prevent potential contamination of freshwater aquifers, we need to keep track of, and approve any drilling penetrating Phanerozoic rock. You will require a borehole license, issued by the Director of Mines. The license is issued for a one-year term and gives you the right, subject to certain conditions, to drill one or more boreholes within the boundaries of the area specified in the Application for Borehole License.

If drilling is required on ice-covered waters, see BMP-12 Drilling on Ice.

The number of drill holes, locations, and drilling program details must be identified in the application.

Applicants wishing to conduct activities within 100 meters of a water body or watercourse must also contact the Department of Fisheries and Oceans Canada for their review if the activities have the potential to negatively impact fish or fish habitat.

Any program requiring water for drilling activities (except water from municipal or private sources) requires approval from the Department of Conservation and Water Stewardship. See BMP-9 Water Crossings. Water intake hoses must have intake screens that meets DFO’s 1995 Freshwater End-of-Pipe Fish Screen Guideline to prevent the impingement or entrainment of fish during pumping activities.

Access roads/trails should be built and maintained to prevent undue erosion and rutting, see BMP-8 Road and Trail Access.

Clearing should be kept to a minimum size and constructed to facilitate drilling operations. A standard drill pad should not exceed 20 meters by 20 meters (or 400 square meters) unless otherwise approved. See BMP-3 Forest Clearing / Harvesting Operations, for further clearing requirements.

A minimum of 100 meters must be maintained between the drill pad and any water body or watercourse unless previously authorized by the Department of Conservation and Water Stewardship. For drilling activities within 100 meters of a water body or watercourse the applicant may have to follow additional procedures outlined in BMP-12 Drilling on Ice.

For drill sites that are not level, the first consideration should be given to leveling methods other than soil stripping (blocking, ice pads, etc.) and site relocation.
not possible, soil stripping should be minimized.

If soil stripping is required, soil horizons are to be removed and stored separately at the edge of the clearing.

Slash material is to be stockpiled at the edge of the clearing and utilized for reclamation of the site. See BMP-14 Restoration.

For HQ (<2.5 inches or <63.5 millimeters) and smaller diameter drill holes in remote locations drilling effluent shall be contained, in sumps, containers, or natural depressions located as close to the drill site as possible, unless otherwise approved.

For larger diameter holes (> 2.5 inches or > 63.5 millimeters) or areas of road access the Department of Conservation and Water Stewardship may require sumps or tanks.

All fuel and lubricants should be stored in a manner that provides secondary containment to prevent spillage as set out in BMP-6 Fuel Handling and Storage.

Where possible all efforts shall be used to prevent drill mud, return water, and cuttings (sludge) from running uncontrolled from the site or to within 100 meters of a water body or watercourse. Appropriate sediment and erosion control measures may need to be implemented to prevent deleterious substances from entering fish habitat.

The applicant must identify in the application any drilling additives that will be used in the program.

Wherever possible, biodegradable mud and non-toxic additives should be used.

An adequate closed circuit system must be utilized for potentially harmful drilling mud and other additives.

Drill mud solids or cuttings with a uranium concentration greater than 0.05 per cent are to be collected and then disposed of down the drill hole and sealed.

Noise abatement devices including mufflers and shrouding are to be used near populated areas.

Upon completion of the program, exposed drill casings shall be cut so that they are 15 cm or less above ground level at the conclusion of operations, unless otherwise approved.

Any drill hole that encounters mineralization with a uranium content greater than 1.0 per cent over a length >1 meter, and with a meter-percent concentration > 5.0, will be sealed by grouting over the entire length of the mineralization zone and not less than 10 meters above and below each mineralization zone.

All artesian drill holes must be reported to the Department of Conservation and Water Stewardship within 30 days of its discovery. All artesian drill holes must be sealed to prevent discharge to the environment.

Reclamation of the drill site must follow procedures outlined in BMP-14 Restoration.

Appropriate precautions are to be undertaken to ensure that deleterious substances do not enter any watercourse.

The proponent is responsible for effective sediment and erosion control:

a. All spoil materials should be disposed of above the high water level, and located and stabilized so that they do not re-enter any watercourse.

b. The proponent is responsible for erosion control on the approaches to ice/snow bridge watercourse crossings all year round. This includes sediment from winter roads entering watercourses during the ice-free seasons.

C. During construction and until re-vegetation is sufficient to control sediment erosion, the proponent should ensure that effective sediment and erosion control measures are in place and that they are functioning properly and are maintained and/or upgraded as required to prevent sediment from entering fish habitat.

The abandonment of boreholes in such a manner as to prevent the vertical movement of fluids between permeable water bearing zones penetrated by the
borehole. This requires:

a. grouting the entire borehole to ground surface using the Tremie technique to place a neat mixture of sulphate resistant (CSA Type 50) grout that will produce a minimum strength of 41,000 kPA.

b. using mechanical plugs in combination with Tremie grouting as described in a plan submitted with the borehole license application, to permanently prevent vertical movement of aquifer fluids between permeable water bearing zones.

Companies wishing to drill in the Western Canada Sedimentary Basin are required to contact the Mines Branch of the Department of Mineral Resources prior to drilling. The Department will advise on any precautions that are required.

RELATED ACTS AND REGULATIONS

Mines and Minerals Act, M162; For drilling, see sections 96 to 101 inc.
Manitoba Mineral Disposition and Mineral Lease Regulation 64/92; Sections 2,3,4 and 7 for Drilling
Site Abandonment and Reclamation in Manitoba Regulation 63/92 (Drilling Regulation)
Manitoba Regulation 65/92 (Quarry Minerals Regulation)
Manitoba Regulation 63/92 (Drilling Regulation), Section 2 and 5 for Waste Management. Fires Prevention and Emergency Response Act, P80, Section 29
Crown Lands Act, C340, Section 7
Provincial Parks Act, P20
Forest Act, F150, Sections 20(3), 23(1) and 28 for Management and Transportation; Sections 9 to 11 for core storage
Environment Act, E125 and Regulations
The Mines and Mineral Act, Manitoba Regulation 63/92 (Drilling Regulation)

EMERGENCY PROCEDURES

These acts/regulations set the standards to be applied at all exploration sites in Manitoba: Workplace Safety and Health Act, W210
Manitoba Regulation 228/94 (Operation of Mines Regulation) Emergency Measures Act, E80

OTHER RESOURCES

Application for Borehole License

CONTACTS

Department of Conservation and Water Stewardship
DRILLING ON ICE

DEPARTMENT OF MINERAL RESOURCES

Many exploration programs involve drilling on ice in the search for mineral deposits. Because potential risks increase from drilling on ice, special attention is given to all drilling phases to prevent or minimize adverse impacts to the environment. Operations may vary between drill rigs or even between holes as situations demand; however, decisions must reflect the requirements outlined in this guideline to reduce potential impacts to the aquatic ecosystem. Some aspects of this Best Management Practice may apply to land-based drilling programs if drilling within 100 metres of a water body or water course (see BMP-11 Drilling on Land).

The following information is provided to describe the various precautionary steps taken to protect the environment when drilling on ice.

DESCRIPTION OF A DIAMOND DRILL

Diamond drills come in a variety of shapes and sizes. Although there are a number of different sizes, manufacturers, and types of drills, they generally adhere to a few simple rules. Diamond drills are almost always primarily powered by a diesel engine. All drills have at least some secondary drive mechanisms that are hydraulic. Typically drill rigs are small, about the size of a small recreational vehicle. The drill is transported to the site on a low bed tractor-trailer and is moved around the site using a dozer/skidder. The drill pipe or “rod” will have a diameter of anywhere from five inches to as small as two inches. Drills are capable of drilling to 300 metres or more, depending on the size of the drill and drill rod string used.

Drilling on ice goes through three basic phases: setting up, drilling, and tearing down. All three of these operations are outlined in detail below:

Setting Up

There must be sufficient ice to support the weight of the drill rig and associated equipment during transportation to the drilling location and when operating on the drill site. If insufficient ice is present, the ice is commonly built up with a series of local floods. Flooding is generally approved by the Department of Conservation and Water Stewardship as long as screening is in place that meets DFO’s 1995 Freshwater End-of-Pipe Fish Screen Guideline to prevent the impingement or entrainment of fish during pumping activities.

The drill is supported on untreated timbers to distribute its weight over the ice and to help level the rig. Some drills are relatively light and need to be stabilized by using ice screws or freezing in anchors. Associated drilling equipment, which includes: drill rods, pumps, mixing tanks, and mechanical support equipment, is brought to the site and usually stored on sleds. When required, fuel and petroleum products necessary for maintenance and operation are temporarily brought to the drill site in appropriate storage containers to prevent spillage, as set out in BMP-6 Fuel Handling and Storage.

Drilling

The first step in drilling is “casing” the hole. This means sealing the hole from bedrock to surface using a large diameter pipe or “rod”. This is a necessary step to ensure that the hole can be located again if any subsequent drill rods need to be removed during the operation. When casing the hole, one factor to contend with may be the depth of the water, or the distance between the drill and something solid. If the water is deep, the drillers will drop their largest rods first (rod size referred to as HW in Figure 1). The HW rod will be pushed and turned as far as it will go into the lake bottom manually and then anchored to the drill. Some disturbance of lake–bottom...
sediments will result from this initial stage, however it is minimal and localized. If the lake bottom is bedrock there will be virtually no disturbance at all. If however consolidated sediments exist then some disturbance to organic matter at the bottom of the lake should be expected.

If the HW encounters bedrock then the next smallest size casing referred to as NW will be lowered inside the HW. The NW rod will be drilled into the rock to form a seal between the rock at the bottom of the lake and the drill at the surface. Once the NW rod is in place the next smaller “NQ” rods can be lowered into the hole.

Applicants conducting activities on or near a water body or watercourse must also contact Fisheries and Oceans Canada for their review if there is the possibility that fish or fish habitats will be negatively impacted.

Any program requiring water for drilling activities (except water from municipal or private sources) requires approval from the Department of Conservation and Water Stewardship, which must be identified in the original application. See BMP-11 Drilling on Land.

All access routes onto the water body must follow the requirements outlined in BMP-8 Road and Trail Access and BMP-9 Water Crossings.

The ice needs to be of sufficient thickness to support the drill and associated equipment both during transportation and drill setup.

Flooding is permitted to build the ice up to sufficient thickness if required. If the water body is fish bearing the intake for the pump must be screened to meet DFO’s Freshwater Intake End-of-Pipe Fish Screen Guideline and the fuel source for the pump must have secondary containment. See BMP-6 Fuel Handling and Storage.

Unless otherwise approved, drilling shall occur in water depth greater than 2 metres, including ice thickness. Additional site assessment and mitigation information will be required if the applicant plans to drill in a water depth less than 2 meters, in fish-bearing water bodies. Contact DFO and the Department of Conservation for information requirements.

Untreated timber or local cut timber can be used to support the drill. If local timber is used, a Forest Products permit authorizing this use is required before any timber harvesting is permitted. All timbers must be removed away from the water body upon completion of drilling operations.

The use of ice screws or freezing in anchors is permitted but must be removed once the drilling operation is completed.

Fuel shall be stored at a shore cache a minimum 100 meters from the high water mark, unless otherwise approved. A limited supply of fuel can be temporarily brought to the site to support the drill. Fuel stored on site must be stored in a secondary containment system; either a large tray or an ice/ snow bermed containment area lined with an impervious liner to the product being stored as set out in BMP-6 Fuel Handling and Storage.

Absorbent matting or drip trays must be used where accidental spills may occur during fueling. Contaminated material is to be removed from the site for proper disposal immediately after cleanup has been completed. Refer to BMP-6 Fuel Handling and Storage for further requirements regarding fuel handling, storage and spills.

The drilling crew is to be trained to respond to a spill should the need arise. All drill rigs must be equipped with a spill kit.
External pumps or motorized equipment used in the drill operation and sitting on the ice shall have secondary containment (e.g. impermeable liner resistant to the product being used, plastic drip trays, etc) as set out in BMP-6 Fuel Handling and Storage.

Any water intake used in fish bearing waters is to have a fish screen that meets DFO’s 1995 Freshwater End-of-Pipe Fish Screen Guideline to prevent the impingement or entrainment of fish during pumping activities.

Noise abatement devices including mufflers and shrouding are to be used near populated areas.

The applicant must identify in the application any drilling additives that will be used down the hole during drilling. All drilling additives must be biodegradable and accompanied by an MSDS sheet. Drill additives should only be used if required and in minimal amounts.

If mixing tanks for drill muds are being used, they must be placed on an impervious liner and any spills are to be cleaned up with absorbent material and contained.

All drilling operations shall use a “closed loop” recycling system with no discharge to the water or ice. In some cases, approval may be given to allow the return fluid to be pumped back to shore and into a natural or constructed sump located 100 meters or greater from the water (in these cases re-circulating drill fluids would not be required).

Drill cuttings must be collected through a filter system and disposed of in a Department of Conservation and Water Stewardship approved landfill or alternatively the drill mud, return fluid and cuttings can be disposed of in a land-based sump placed 100 meters above the high water mark. Any requirements in BMP-11 & 12 Drilling addressing operation and handling of the land-based sump must be followed.

The drill area is to be kept orderly and any garbage is to be removed daily from the area to an approved disposal site. The ice surface is to be kept clean at all times. Once drilling is complete, all material is to be removed from the ice and the site left in a safe and clean state.

The drill area is to be bermed or fenced to prevent unauthorized entry and provide sufficient warning to passersby and should include appropriate signage.

Once drilling is completed, clean water must be circulated through the hole to remove any remaining drill fluids and cuttings.

Drill holes must have all rods and casing removed prior to abandoning the hole.

Drill mud solids or cuttings with a uranium concentration greater than 0.05 % are to be disposed of down the drill hole and sealed.

Any drill hole that encounters uranium mineralization with a content greater than 1.0 per cent over a length of more than 1 meter with a meter-percent concentration greater than 5.0 will be sealed by cementing (grouting) over the entire length of the mineralization zone and not less than 10 meters above or below each mineralization zone.

Drill holes are to be sealed by cementing (grouting) the upper 30 meters of bedrock or the entire depth of the hole, whichever is less.

Companies wishing to drill in the Western Canada Sedimentary Basin are required to contact the Mines Branch prior to drilling. The Department of Mineral Resources will advise of any precautions that are required.

OTHER RESOURCES
Safety Guide for Operations on Ice
Prospectors and Developers Association of Canada
Health and Safety - Drilling Sites (Section 20.3.3)

CONTACTS
Department of Conservation and Water Stewardship
Department of Fisheries and Oceans
CORE STORAGE

Exploration companies use drilling to test for mineral commodities or geological structures. Commodity prices or geological models change with time and as a result, core is commonly re-sampled and re-logged. Utilization of core drilled in the past is a prospecting tool that is a cost-effective means of re-exploring the site. When core is properly boxed and stored, the potential usefulness of core will be maintained for 25 years or more. The mineral industry and the Mines Branch utilize core for geological mapping, research and special studies. The Department of Mineral Resources is the regulating agency for core storage. Drill core cannot be disposed of without authorization by the Director of Mines.

Diamond drilling is one of the most widely used tools in mineral exploration. Core is a cylindrical section of rock usually 1.4 to 3.4 inches (35 millimeters to 85 millimeters) in diameter and up to many meters in length and is brought to the surface for geological examination or laboratory analysis. It is commonly stored in wooden boxes. The study of drill cores assists in the three-dimensional reconstruction and interpretation of bedrock geology and is normally environmentally safe and non-hazardous.

DISTANCE FROM WATER BODIES

Unless otherwise approved, storage areas must be located a minimum of 100 meters from the high waterline of all water bodies.

LONG TERM STORAGE ON THE SITE

Before an applicant is “released” from their responsibility associated with all applicable permits, all core remaining on site must be stored in standard core boxes. Each box will be identified with aluminum labels securely attached, indicating the hole number and core interval represented. There are three acceptable ways to store the core, which can be used individually or in combination.

Cross Stacking

The core boxes could be cross-stacked on top of one another (each layer should be stacked perpendicular to the layer above and below it), with at least one inch between individual boxes in a layer (to enhance ventilation), on a well-drained site.

+ The bottom layer of boxes should be approximately 15-45 centimeters off the ground and supported by solid footings.
+ The stacked boxes should be stable.
+ Each box on the top layer of the stack should be sealed with a standard core box lid.
+ Each stack should have a simple covering to provide shelter from the elements.

Suggestions include, but are not limited to: well-ventilated tarpaulin covers; another layer of empty core boxes attached perpendicular to the top layer; a layer of plywood that extends beyond the edge of the core boxes.

Core Racks

The permit holder may be allowed to leave the core in core storage racks that are provided with a simple covering, which extends beyond the end of the core boxes. More elaborate structures that have an element of permanence are not prohibited, but may be subject to additional permitting. Core racks should be inspected periodically to ensure they maintain structural integrity.

Transportation to Department of Mineral Resources Storage Facility

Approval can be granted, if the applicant agrees, to
transport either all core or representative sections of core to the Manitoba Geological Survey core storage facilities.

**Long Term Storage Off-Site**
The applicant may be released from permit obligations if the operator stores the core in a long-term storage facility not located on the property, with the permission of the Department of Mineral Resources (Director of Mines).

**Time of Assuming Responsibility**
The operator is responsible for all core drilled on a property from the date they acquired the property. If the property is sold or reassigned the new operator is responsible for all core.

**Salvage of Core**
An applicant working on a claim is encouraged to take all reasonable actions to salvage (if possible) or upgrade any core racks that pre-date their involvement.

**Location of Core**
The applicant should note the location of core with their work permit applications and assessment reports submitted to Department of Mineral Resources. Any subsequent change in location shall be communicated to the Department of Mineral Resources.

**RELATED ACTS AND REGULATIONS**
Mines and Minerals Act, Regulation 63-92, Section 8 and Section 9(b)

**OTHER RESOURCES**
A list of available Precambrian and Phanerozoic drillcore, excluding oil and gas core, is available from Open File Report OF2012-1: GIS compilation of exploration drillcore from all Manitoba Geological Survey drillcore libraries by C.R. McGregor.

**CONTACTS**
Department of Mineral Resources

The core libraries are not always manned; please direct all enquiries and requests for access to:

**Northern facilities (The Pas, Thompson, Lynn Lake, Flin Flon):**
Tom Heine, Regional Geologist
Manitoba Geological Survey
Manitoba Innovation, Energy and Mines
143 Main Street, Suite 201
Flin Flon, MB R8A 1K2
Phone: (204) 687-1633
E-mail: thomas.heine@gov.mb.ca

**Brady Road facility (Winnipeg):**
Jim Payne, Assessment Geologist
Mines Branch
Manitoba Innovation, Energy and Mines
1395 Ellice Avenue, Suite 360
Winnipeg, MB R3G 3P2
Phone: (204) 945-6535
E-mail: james.payne@gov.mb.ca

Contact facility managers during regular office hours:
Monday to Friday
8:30 a.m. to 4:30 p.m.


Reclamation must be recognized as an integral part of exploration, and therefore must be included in the pre-exploration planning. Proper planning will assist the applicant in returning disturbed areas to an acceptable natural and productive state.

It is impossible to define every situation because exploration activities and environmental conditions are variable, so flexibility must be built into the permitting process.

Reclamation: planning should include minimizing impacts and avoiding surface disturbance to assist in reducing reclamation requirements and costs for the program.

Re-vegetation: the purpose in rehabilitating disturbed areas is to encourage the progressive establishment of natural vegetation consistent with pre-exploration conditions.

The need to actively re-vegetate a site depends on the nature of the area and the disturbances created by the work. If proper planning is done to minimize surface disturbance, natural regeneration of the site should take place without the need for additional reclamation work. If surface disturbance is created, the site may need to be actively stabilized and re-vegetated. Actively re-vegetating a site as soon as possible following re-contouring is the best way to stabilize slopes, control weeds and exotic plants, minimize erosion, and encourage the establishment of native plant communities.

All areas affected by mineral exploration activities (building sites, tailings ponds, sedimentation ponds, waste rock piles, etc.) must be re-vegetated to control erosion and restore the site’s natural condition. However, if all or part of the mineral exploration site cannot be re-vegetated, the proponent must prove that it is nevertheless in “satisfactory condition”.

In general, grass and bushes should be planted in areas prone to erosion. Other areas may be seeded. Silt fencing and other erosion barriers may be required to prevent siltation of local watercourses, as set out in BMP-9 Water Crossings. The characteristics of this vegetation should resemble that of the natural environment except for the early growth, which may be a protective cover crop of non-seeding annuals.

Before re-vegetation, the land must be properly prepared. Where applicable, organic soil that had been saved during original site development must be spread. Vegetation must be self-sufficient six years after planting and require no fertilization or maintenance.

INTERIM RECLAMATION

It may be beneficial to conduct interim reclamation on a site where future exploration plans include returning to the site in subsequent years to do more work. This is typical of sites used for access and core drilling where soil stripping may occur. To avoid soil mixing and reduced soil quality from continuous soil handling practices, the Department of Conservation and Water Stewardship may approve interim reclamation. Financial assurances may be requested to ensure future site reclamation.

ABANDONMENT

The work area should undergo a final inspection performed by the Department of Conservation and Water Stewardship. Permit expiry does not exempt the applicant from future liability.
RECLAMATION

a. As part of the exploration application, reclamation measures must be indicated.

b. The Department of Conservation and Water Stewardship must approve all reclamation measures and trail/road closures.

c. All infrastructure and waste must be removed from the site at conclusion of the program.

d. Approval from the Department of Conservation and Water Stewardship is required for the long term storage on Crown resource land managed by the Department of Conservation and Water Stewardship, except for core storage as covered under BMP-13 Core Storage.

e. Water works, intakes, culverts, docks, bridges (includes snow/ice bridges) and any other structures installed in conjunction with waters are to be removed, unless otherwise authorized by the Department of Conservation and Water Stewardship. Fisheries and Oceans Canada and/or Transport Canada may be involved in any permitting and decommissioning.

f. Unless otherwise approved, surface disturbances are to be re-contoured as close as possible to their original state.

g. Soil horizons are to be replaced over the disturbed site in the same manner they were stripped and stored.

h. In a location where there is a reasonable chance that erosion will occur due to soil type or grade, slash material is to be spread evenly over the disturbed area and worked into the surface. If slash is not available, other approved sediment and erosion control options may be considered.

RE-VEGETATION

a. If active re-vegetation is required by the Department of Conservation and Water Stewardship (e.g. large cleared areas, creek crossings, access points on to lakes, steep slopes) the following guidelines will apply:

i. Suitable native plant species are to be encouraged so the eventual plant community will comprise only native species. Seeding of a native plant species or use of plant materials in reclamation are to be approved by the Department of Conservation and Water Stewardship.

ii. For best results, seeding of native species should occur in early spring or dormant seeded in late fall.

iii. Other plant species used for cover crops or soil stability may be considered on a site-by-site basis.

iv. Applicants must ensure that any plant material used for reclamation is free of noxious weeds as specified under The Seeds Act (Canada).

b. Soil quality in a reclaimed area must be capable of sustaining a native plant community.

c. The Department of Conservation and Water Stewardship may approve the use of mulches, soil stabilizers, and fertilizers to establish plant growth and reduce erosion. Such assistance should not be carried to the extent that the vegetation would depend on these inputs for their survival or that these inputs allowed non-native species to dominate and exclude native species from the area.

d. In Forest Management Agreement (FMA) areas where forest management fees are collected, the establishment of tree species is the responsibility of the FMA holder. The applicant is responsible only for the establishment of the ground cover. If required by the Department of Conservation and Water Stewardship, the applicant may be responsible for the establishment of trees outside the FMA areas.

e. Reclamation sites located within active grazing areas should be fenced unless otherwise approved.

INTERIM RECLAMATION

a. Disturbed areas (temporary work camps, etc.) not reclaimed at the time of the program closure must continue to be covered by a valid permit or surface disposition.

b. All soils must be stabilized to prevent erosion (e.g. wind, water, etc.).
c. Topsoil storage piles must not exceed one meter in depth and may require seeding of an approved plant species.

ABANDONMENT

a. All required restoration work and road closures must be completed prior to abandonment.

b. The applicant must notify the Department of Conservation and Water Stewardship of the estimated completion date of the program.

c. Notification must be done as soon as the applicant is aware of the completion date. It is a requirement that notification be provided two weeks prior to the date.

d. For sites not accessible by road, applicants must arrange transportation to the site for the inspecting Department of Conservation and Water Stewardship contact.

RECLAMATION WORKS IN OR NEAR FISH HABITAT

Silt and other fine sediments are considered a deleterious substance under the federal The Fisheries Act if they enter fish habitat at any time during a project. Therefore, it is the responsibility of the proponent to implement appropriate sediment and erosion control measures as required to prevent silt and other deleterious substances from entering fish habitat.

a. All spoil materials should be disposed of above the high water level and located and stabilized so that they do not re-enter any watercourse or water body.

b. The proponent is responsible for year round erosion control on all approaches leading to any water crossings (e.g. clear span bridges, ice/snow bridges, culvert crossings, etc.) or access trails/roads onto lakes, even during the ice-free seasons.

c. During construction and until re-vegetation is sufficient to control sediment erosion, the proponent should ensure that effective sediment and erosion control measures are in place and that they are functioning properly and are maintained and upgraded as required to prevent sediment from entering fish habitat. See BMP-008 (Water Crossings).

CLOSURE PLAN

To proceed with an advanced exploration project (as defined in The Mines and Minerals Act), companies must also submit a closure plan for approval by the Director of Mines. The plan’s role is to protect the environment during excavation, and ensure site rehabilitation once the project is complete.

Include the measures that will be taken to restore the land to its near-original state and to establish a satisfactory degree of safety, in the closure plan. A financial commitment may also be required as part of the closure plan. While the plan is submitted to Manitoba Mineral Resources, the departments of Conservation and Water Stewardship, and Labour and Immigration participate in the closure approval process.

Should a project not proceed into production, a site inspection will be conducted once the company indicates it has met all the conditions outlined in the closure plan. Based on the site inspection, further closure measures may be required. A final report and site visit are necessary prior to the return of any unused portion of the financial deposit.

Manitoba Regulation 67/99 (Mine Closure Regulation) and the guidelines will be forwarded to you upon request.
RELATED ACTS AND REGULATIONS

The Mines and Minerals Act
Manitoba Regulation 67/99
Mine Closure Regulation

OTHER RESOURCES

General Closure Plan Guidelines:

CONTACTS

Director of Mines
Manitoba Mineral Resources
Mines Branch
Suite 360 - 1395 Ellice Avenue
Winnipeg, MB R3G 3P2
Phone: (204) 945-6522
Fax: (204) 945-8427
E-mail: Denise.Jonasson@gov.mb.ca

Department of Conservation and Water Stewardship
Environmental Approvals
Winnipeg, MB R3C 1A5

Manager
Mines and Wastewater
http://www.gov.mb.ca/conservation/eal/contact.html
- director
Phone: (204) 945-7015
Email: Siobhan.BurlandRoss@gov.mb.ca
REFERENCES


INDIVIDUAL
APPLICATION FOR PROSPECTING LICENCE
THE MINES AND MINERALS ACT

PLEASE PRINT:

Name of Applicant
Last Name
Given Name(s)
Address
City
Province
Postal Code
Telephone No.
Fax No.
E-mail

I hereby make an application for a prospecting licence pursuant to Subsection 4(1) of The Mineral Disposition and Mineral Lease Regulation MR 64/92 under The Mines and Minerals Act.

Enclosed is the fee of $15.00. Make cheque payable to the Minister of Finance, Manitoba.

I hereby declare that I am eighteen years of age or older.

Previous exploration experience:

Date
Signature of Applicant

NOTE:

It is an offence under The Mines and Minerals Act to make a false statement on this document.

Application to be filed at the Office of the Recorder

WINNIPEG
Unit 360
1395 Ellice Avenue
WINNIPEG, Manitoba
R3G 3P2
Phone: (204) 945-6527
Fax: (204) 949-2978

FLIN FLON
Barrow Building
Room 201, 143 Main Street
FLIN FLON, Manitoba
R8A 1K2
Phone: (204) 687-1630
Fax: (204) 687-1634

OFFICIAL USE ONLY

Cheque/Cash/Auth No.
Amount
Payer
Licence Number

Date
Receipt No.
Amount

Ce document est disponible en français
COMPANY APPLICATION FOR PROSPECTING LICENCE
THE MINES AND MINERALS ACT

PLEASE PRINT:

Company Name
Address
City Province Postal Code
Telephone No. Fax Number
Contact Person

We hereby make an application for a prospecting licence pursuant to Subsection 4(1) of The Mineral Disposition and Mineral Lease Regulation MR 64/92 under The Mines and Minerals Act.

Enclosed is the fee of $287.00. Make cheque payable to the Minister of Finance, Manitoba.

Date Signature of Applicant

NOTE:
1. It is an offence under The Mines and Minerals Act to make a false statement on this document.
2. The corporation must be registered to do business in Manitoba.
3. Application to be filed at the Office of the Recorder

WINNIPEG
Unit 360
1395 Ellice Avenue
WINNIPEG, Manitoba R3G 3P2
Phone: (204) 945-6527
Fax: (204) 948-2578

FLIN FLON
Barrow Building
Room 201, 143 Main Street
FLIN FLON, Manitoba R8A 1K2
Phone: (204) 687-1630
Fax: (204) 687-1634

OFFICIAL USE ONLY
Cheque/Cash/Auth No. ____________________
Amount ____________________
Payer ____________________
Licence Number MB2

Date ____________________
Receipt No. ____________________
Amount ____________________
## APPENDIX 3 WORK PERMIT APPLICATION INFORMATION


### Work Permit Application

**CONSERVATION AND WATER STEWARDSHIP**

A Work Permit is issued only to the project's proposer: (the person, company, organization, federal government department/agency, or local government agency who is sponsoring/financing the project or holds the permit/licence issued by a Department of the Government of Manitoba, under which the project is conducted).

### 1(a) APPLICANT

**Go to 1(b) if a Corporation or Federal/Municipal Government Department/Agency**

<table>
<thead>
<tr>
<th>Name</th>
<th>LAST</th>
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</thead>
<tbody>
<tr>
<td>Mailing Address</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City</td>
<td>Country</td>
<td>Postal Code</td>
<td></td>
</tr>
<tr>
<td>Telephone: Home</td>
<td>Work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fax</td>
<td>Mobile</td>
<td>(on site contact number)</td>
<td></td>
</tr>
</tbody>
</table>

### 1(b) CORPORATE OR FEDERAL/MUNICIPAL GOVERNMENT DEPARTMENT/AGENCY APPLICANT

| Registered Name | |
| Mailing Address: | |
| City | Country | Postal Code |
| Project Supervisor: (Please print) | Job Title |
| Telephone: Work | Fax |
| Mobile | Email |
| On-Site Supervisor: (if different than above) | Job Title |
| Telephone: Work | Fax |
| Mobile | Email |

### 2 PROJECT DESCRIPTION

(attach a detailed project description and maps if applicable):

| Type/Purpose of Project | |
| General Location of Project | |
| Project Start Date | Project Completion Date |
APPENDIX 4 RELATED ACTS AND REGULATIONS

M162 - Act
M162 - The Mines and Minerals Act
M162 - Regulations

MR 63/92 - Drilling Regulation, 1992
MR 204/2011 - Drilling Regulation, 1992, amendment

MR 64/92 - Mineral Disposition and Mineral Lease Regulation, 1992

MR 65/92 - Quarry Minerals Regulation 1992

MR 67/99 - Mine Closure Regulation

+ General Closure Plan Guidelines, available in html or PDF format
+ Mine Closure Guidelines, Financial Assurance, available in html or PDF format

MR 165/92 - Prospectors Assistance Program Regulation
MR 202/2011 - Prospectors Assistance Program Regulation, amendment

+ Amendment - Regulation 3/2001

P80 - Regulations
MR 81/2011 - Provincial Planning Regulation
W210 - Workplace Safety and Health Act W210 - Regulations
MR 212/2011 - Operation of Mines Regulation

ENVIRONMENTAL PROVINCE OF MANITOBA
+ Environment Act E125
+ Public Health Act, P210
+ Workplace Safety and Health Act, W210
+ Mines and Minerals Act, M162
+ Mining and Metallurgy Compensation Act, M190
+ Provincial Parks Act, P20
+ Manitoba Regulation 7/91 changed to Park Activity Regulation

GOVERNMENT OF CANADA
+ Canadian Environmental Protection Act
+ Fisheries Act
+ Canada Wildlife Act
+ Proposed Federal Endangered Species Protection Legislation

OTHER RELATED ACTS AND REGULATIONS
M190 - The Mining and Metallurgy Compensation Act
M165 - The Mining Claim Tax Act
M195 - The Mining Tax Act
P80 - The Planning Act
APPENDIX 5 DEPARTMENT CONTACT INFORMATION

Department of Mineral Resources

Winnipeg
Unit 360-1395 Ellice Avenue
Winnipeg, MB R3G 3P2
Phone: (204) 945-6505
Fax: (204) 945-8427
E-mail: ernest.armitt@gov.mb.ca

Flin Flon
143 Main Street
Flin Flon, MB R8A 1K2
Phone: (204) 687-1630
Fax: (204) 687-1623
E-mail: thomas.heine@gov.mb.ca

FIRE COMMISSIONER
The main concern of this office is The Fires Prevention and Emergency Response Act and The Manitoba Fire Code regulations under the act. This office also administers The Buildings and Mobile Homes Act and The Manitoba Building/Plumbing Codes.

MANAGER
Codes and Standards
Phone: (204) 945-3397

MECHANICAL AND ENGINEERING BRANCH
Mechanical and Engineering Branch is responsible for the approval and inspection of such items as boilers, pressure vessels, elevators, direct-fixed propane mine airheaters, and oil-fired equipment.

MECHANICAL AND ENGINEERING BRANCH
Phone: (204) 945-3373

There are several other service areas and agencies within the Department of Labour and Immigration, all geared to supporting your mining initiatives. They include: Conciliation, Mediation and Pay Equities Services Branch, Workplace Safety and Health Library, Occupational Hygiene Unit, and the Occupational Health Branch.

For additional information on any of these services contact:
Director
Mines Inspections Branch
Department of Labour and Immigration
Phone: (204) 945-0848

Once you begin work on your exploration property, contact the Mines Inspections Branch. A Mines Inspector will be assigned to help ensure that all the required codes and regulations are met.

Dennis Fontaine - Acting Director
Mine Safety Branch
Phone: (204) 677-6821

The main focus of this branch is the safety and health of the people on the project. Its activities are based on The Workplace Safety and Health Act, W210 and regulations there under. This, for example, is where you would apply for a blaster’s license. If you’re conducting advanced exploration or are planning a new mine project, then you’ll need to file a mining report with the department. The report would deal with issues ranging from advanced exploration, mine and shaft development plans to mine operating plans and ventilation systems data. This report is typically done in conjunction with the filing of an Environmental Impact Statement.

Once you begin work on your exploration property, contact the Mines Inspections Branch. A Mines Inspector will be assigned to help ensure that all the required codes and regulations are met.

Dennis Fontaine - Acting Director
Mine Safety Branch
Phone: (204) 677-6821
If your exploration, or new mine site is located off a limited access or provincial trunk highway (PTH #1-110), contact the Highway Traffic Board which administers The Highways Protection Act, H50.

TRANSPORTATION

If your site is located adjacent to a provincial road (PR #200-600) you’ll work with Manitoba Infrastructure and Transportation, which is responsible for that particular act. The Director of Regional Operations in the Highways Region you are working in will give you further assistance if your location falls outside of this category.

If you need information on the moving of heavy or oversize loads, contact Manitoba Infrastructure and Transportation.

Motor Carrier Permits and Development
Department of Infrastructure and Transportation
Phone: (204) 945-3961

Chairperson
Highway Traffic Board
Phone: (204) 945-8912

Department of Conservation and Water Stewardship
http://www.gov.mb.ca/conservation/

Important Acts:
The Fires Prevention and Emergency Response Act
The Crown Lands Act
The Provincial Parks Act
The Environment Act

Director
Headquarters Operations
Phone: (204) 945-6647

Land and Geomatics Branch
The Lands and Geomatics Branch handles all applications for Crown land lease/permits and amendments or assignments of a lease/permit.

Director
Lands and Geomatics Branch
Phone: (204) 476-3441

Forestry Branch
Forestry Branch is responsible for issuing general permits for all work carried out within provincial forests and issuing timber permits authorizing the cutting and clearing of timber from project sites located on all provincial Crown lands.

Director
Forestry Branch
Phone: (204) 945-7998

Parks and Natural Areas Branch
The Parks and Natural Areas Branch issues work permits/licenses for exploration and development in Manitoba’s provincial parks.

Director
Parks and Natural Areas Branch
Phone: (204) 945-4362

Wildlife and Ecosystem Protection Branch
The Wildlife and Ecosystem Protection Branch issues wildlife management area (WMA) use permits for exploration work to be conducted in WMAs throughout the province.
APPENDIX 5 DEPARTMENT CONTACT INFORMATION

-WILDLIFE LANDS SPECIALIST
Wildlife and Ecosystem Protection Branch Phone: (204) 945-7763 http://www.gov.mb.ca/conservation/wildlife/index.html

-MANITOBA WATER STEWARDSHIP
Manitoba Water Stewardship issues the Water Rights license required once a production decision has been made. The license addresses such issues as the use of water for milling and tailings.

Water Licensing Section
Manitoba Water Stewardship
Phone: (204) 945-6488

-ENVIRONMENTAL APPROVALS BRANCH
The Environmental Approvals Branch is responsible for issuing licenses under The Environment Act, E125 and for the coordination and evaluation of Environmental Impact Statements. It takes the lead role in implementing the Federal Metal Mining Effluent Regulation through The Environment Act licensing process. In addition, Conservation administers The Public Health Act, which deals with issues such as atmospheric pollution, sanitation, food and food handling, water works and sewage systems. The Dangerous Goods Handling and Transportation Act and The Fisheries Act are also administered by this department.

Environmental Engineer
Phone: (204) 945-7013

Conservation and Water Stewardship Regional District Office Contacts

CENTRAL REGION [CENTRAL REGION MAP]
Ashern District Office
Box 410 Ashern, MB R0C 0E0
(204) 768-2368

Grand Beach District Office
Box 220 Grand Beach, MB R0E 0T0
(204) 754-5040

Gypsumville District Office
Box 9 Gypsumville, MB R0C lJ0
(204) 659-5208

Hodgson District Office
Box 119 Hodgson, MB R0C lN0
(204) 372-6296

Lundar District Office
Box 10 Lundar, MB R0C 1Y0
(204) 762-5229

Manitou District Office
Box 10 Manitou, MB R0G lG0
(204) 242-2950

Portage la Prairie District Office
25 Tupper St. N. Portage la Prairie, MB R1N 3K1 (204) 239-3204

Riverton District Office
Box 70 Riverton, MB R0C 2R0
(204) 378-2261

Selkirk District Office
1 Keystone Dr. Selkirk, MB R1A 2H5
(204) 785-5080

Winnipeg District Office
Box 30, 200 Saulteaux Crescent
Winnipeg, MB R3J 3W3
(204) 945-7257
EASTERN REGION
[EASTERN REGION MAP]
Beausejour District Office
Box 50, 20 First Street S. Beausejour, MB R0E 0C0
(204) 268-6056

Falcon Lake District Office
Box 40 Falcon Lake, MB R0E 0N0 (204) 349-2201

Lac du Bonnet District Office
Box 850 Lac du Bonnet, MB R0E 1A0
(204) 345-1400

Lake Winnipeg East District Office
Box 850 Lac du Bonnet, MB R0E 1A0
(204) 345-1400

Pine Falls District Office
Box 389 Pine Falls, MB R0E 1M0
(204) 367-6130

Rennie District Office
Box 130 Rennie, MB R0E 1R0
(204) 369-3153

Seven Sisters District Office
Box 9 Seven Sisters, MB R0E 1Y0
(204) 348-4004

Sprague/Piney District Office
Box 70 Sprague, MB R0A 1Z0
(204) 437-2348

Steinbach District Office
Unit B - 284 Reimer Ave. Steinbach, MB R5G 0R5
(204) 346-6110

WESTERN REGION
[WESTERN REGION MAP]
Boissevain District Office
Box 820 Boissevain, MB R0K 0E0
(204) 534-2028

Carberry District Office
Box 900 Carberry, MB R0K 0H0
(204) 834-8800

Dauphin District Office
Box 10, 27-2nd Avenue SW Dauphin, MB R7N 3E5
(204) 622-2106

Neepawa District Office
Box 1089 Neepawa, MB R0J 1H0
(204) 476-2076

Roblin/Grandview District Office
Box 849 Roblin, MB R0L 1P0
(204) 937-6452

Shoal Lake District Office
Box 416 Shoal Lake, MB R0J 1Z0
(204) 759-4080

Swan River District Office
Box 640 Swan River, MB R0L 1Z0
(204) 734-3429

Virden District Office
Box 1360 Virden, MB R0L 2C0
(204) 748-4240

Winnipegosis District Office
Box 366 Winnipegosis, MB R0L 2G0
(204) 656-7030

NORTHEAST REGION
[NORTHEAST REGION MAP]
Churchill District Office
Box 760 Churchill, MB R0B 0E0
(204) 675-8897

Gillam District Office
Box 429 Gillam, MB R0B 0L0
(204) 652-2273

Gods Lake Narrows District Office
Gods Narrows, MB R0B 0M0
(204) 335-2366

Island Lake District Office
Box 69 Stevenson Island, MB R0B 2H0
(204) 456-2362

Leaf Rapids District Office
Box 430 Leaf Rapids, MB R0B 1W0
(204) 473-8133

Lynn Lake District Office
Box 239 Lynn Lake, MB R0B 0W0
(204) 356-2413

Norway House District Office
Box 100 Norway House, MB R0B 1B0
(204) 359-6877

Thompson District Office
Box 28, 59 Elizabeth Rd. Thompson, MB R8N 1X4
(204) 677-6640

Wabowden District Office
Box 40 Wabowden, MB R0B 1S0
(204) 689-268

Winnipegosis District Office
Box 366 Winnipegosis, MB R0L 2G0
(204) 656-7030

NORTHWEST REGION
[NORTHWEST REGION MAP]
Cranberry Portage District Office
Box 130 Cranberry Portage, MB R0B 0H0
(204) 472-3331

Flin Flon District Office
203 - 143 Main St. Flin Flon, MB R8A 1K2
(204) 687-1640

Grand Rapids District Office
Box 322 Grand Rapids, MB R0C 1E0
(204) 639-2241

Snow Lake District Office
Box 339 Snow Lake, MB R0B 1M0
(204) 358-2521

The Pas District Office
Box 2550 3rd St. & Ross Ave. The Pas, MB R9A 1M4
(204) 627-8287
APPENDIX 6 EXPLORATION AND MINING GUIDE
APPLICATION FORMS

http://www.manitoba.ca/iem/busdev/exp-guide/permit-forms.html#mb1

Note: Adobe Acrobat Reader is required to view and print Portable Document Format (PDF) forms. To download a free copy of Acrobat Reader, visit Adobe’s website.

THE MINES AND MINERALS ACT
LOI SUR LES MINES ET LES MINÉRAUX

Application for a Borehole License
PDF editable/printable form
Borehole - English (instructions)
NOTE: This PDF is best printed on 8.5” x 14” (legal size) paper

MB1 - Application for Prospecting License
Individual - $13.00
PDF editable/printable form
MB1 - English (instructions), MB1 - Français (directives)

MB2 - Application for Prospecting License
Company - $257.00
PDF editable/printable form
MB2 - English (instructions), MB2 - Français (directives)

MB5 - Application to Report and Apply Required Work
PDF editable/printable form
MB5 - English (instructions), MB5 - Français (directives)
NOTE: This PDF is best printed on 8.5” x 14” (legal size) paper

MB6 - Allocation of Required Work Credits
PDF editable/printable form
MB6 - English (instructions), MB6 - Français (directives)
NOTE: This PDF is best printed on 8.5” x 14” (legal size) paper

MB9 - Application for Grouping
PDF editable/printable form
MB9 - English (instructions), MB9 - Français (directives)

MB11 - Transfer of Mineral Disposition(s) and Mineral Lease(s)
PDF editable/printable form
MB11 - English (instructions), MB11 - Français (directives)
NOTE: This PDF is best printed on 8.5” x 14” (legal size) paper

MB12 - Application to Record a Mining Claim in a Surveyed Territory
PDF editable/printable form
MB12 - English (instructions), MB12 - Français (directives)
NOTE: This PDF is best printed on 8.5” x 14” (legal size) paper

MB13 - Application to Record a Mining Claim in Unsurveyed Territory
PDF editable/printable form
MB13 - English (instructions), MB13 - Français (directives)
NOTE: This PDF is best printed on 8.5” x 14” (legal size) paper

MB15 - Notice of Dispute
PDF editable/printable form
MB15 - English (instructions), MB15 - Français (directives)
NOTE: This PDF is best printed on 8.5” x 14” (legal size) paper

MB16 - Application to Reduce a Claim
PDF editable/printable form
MB16 - English (instructions)
NOTE: This PDF is best printed on 8.5” x 14” (legal size) paper

MB17 - Application for a Mineral Lease
PDF editable/printable form
MB17 - English (instructions)
NOTE: This PDF is best printed on 8.5” x 14” (legal size) paper

MB19 - Notice of Application for Certificate of Survey
PDF editable/printable form
MB19 - English (instructions)
MB20 - Application for Certificate of Survey
PDF editable / printable form
MB20 - English (instructions)
NOTE: This PDF is best printed on 8.5” x 14” (legal size) paper

MB22 - Application to Amalgamate the Area
of a Mineral Lease
PDF editable / printable form
MB22 - English (instructions)
NOTE: This PDF is best printed on 8.5” x 14” (legal size) paper

MB23 - Application to Subdivide the Area
of a Mineral Lease
PDF editable / printable form
MB23 - English (instructions)
NOTE: This PDF is best printed on 8.5” x 14” (legal size) paper

MB24 - Application to Reduce or Enlarge the Area
of a Mineral Lease
PDF editable / printable form
MB24 - English (instructions)

MB25 - Application for a Mineral Exploration License
PDF editable / printable form
MB25 - English (instructions), MB25 - Français (directives)
NOTE: This PDF is best printed on 8.5” x 14” (legal size) paper

MB27 - Notice of Airborne Survey
PDF editable / printable form
MB27 - English (instructions)
Application for a Surface Lease PDF editable / printable form English (instructions)
NOTE: This PDF is best printed on 8.5” x 14” (legal size) paper
# APPENDIX 7 FEE SCHEDULE

<table>
<thead>
<tr>
<th>Service Description</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Application for mineral exploration license</td>
<td>$401</td>
</tr>
<tr>
<td>2 Application for relief from forfeiture or for an extension of time, for each mineral</td>
<td>$67</td>
</tr>
<tr>
<td>3 Application for mineral lease and for renewal</td>
<td>$267</td>
</tr>
<tr>
<td>4 Application for surface lease</td>
<td>$67</td>
</tr>
<tr>
<td>5 Application to the board</td>
<td>$359</td>
</tr>
<tr>
<td>6 Copy of a recorded document or instrument</td>
<td>$7</td>
</tr>
<tr>
<td>7 Claim tags, set or duplicate set of four</td>
<td>$7.50</td>
</tr>
<tr>
<td>8 Claim map, full sheet</td>
<td>$4</td>
</tr>
<tr>
<td>9 Claim map, half sheet (digitized)</td>
<td>$2</td>
</tr>
<tr>
<td>10 Filing notice of dispute</td>
<td>$71</td>
</tr>
<tr>
<td>11 Filing report on required work, for each mineral claim, per year</td>
<td>$13</td>
</tr>
<tr>
<td>12 Grouping, per mineral disposition or mineral lease</td>
<td>$7</td>
</tr>
<tr>
<td>13 Prospecting license issued to an individual</td>
<td>$15</td>
</tr>
<tr>
<td>14 Prospecting license issued to a corporation, partnership, limited partnership or syndicate</td>
<td>$287</td>
</tr>
<tr>
<td>15 Recording claim in surveyed territory (non-refundable)</td>
<td>$67</td>
</tr>
<tr>
<td>16 Recording claim in unsurveyed territory</td>
<td>$16</td>
</tr>
<tr>
<td>17 Registration of an assignment, transfer, instrument or any other document, for each mineral claim</td>
<td>$15</td>
</tr>
<tr>
<td>18 Computer generated reports based on client specified search criteria ordered through the office of the recorder per request (plus $0.50 for each page)</td>
<td>$20</td>
</tr>
<tr>
<td>19 For the provision of any other service for which no fee is prescribed, per hour or part of an hour</td>
<td>$25</td>
</tr>
</tbody>
</table>
RENTALS

Rental for a first term mineral lease or the renewal of a mineral lease in production:
$10.50 per hectare or fraction thereof per year but not less than $193

Rental for a first term mineral lease not in production:
$12 per hectare or fraction thereof per year but not less than $257

Rental for a renewal mineral lease when the lease is not in production:
$12 per hectare or fraction thereof per year but not less than $200

Rental for a surface lease:
$7 per hectare or fraction thereof per year but not less than $144

EXPENDITURES

Minimum expenditures of required work where the area covered by the mineral exploration license is located in:

(a) The area designated as Zone A:
  + $1.25 per hectare in the first year of the license
  + $5 per hectare in the second year of the license
  + $7.50 per hectare in the third year of the license
  + $10 per hectare in the fourth year of the license if the license is renewed
  + $12.50 per hectare in the fifth year of the license if the license is renewed
  + $15 per hectare in the sixth year of the license if the license is renewed

(b) The area designated Zone B:
  + $0.50 per hectare in the first year of the license
  + $1 per hectare in the second year of the license
  + $1.50 per hectare in the third year of the license
  + $3 per hectare in the fourth year of the license
  + $4 per hectare in the fifth year of the license
  + $4 per hectare in each of the sixth and seventh years of the license if the license is renewed
  + $5 per hectare in each of the eighth and ninth years of the license if the license is renewed
  + $6 per hectare in the 10th year of the license if the license is renewed

Minimum expenditures for required work on a claim:

(a) $12.50 per hectare or part thereof for each of the second to the 10th years

(b) $25 per hectare or part thereof for the 11th year and for each year thereafter