Snowmobile Rail Crossings

Standards for the Maintenance of Established Rail Crossings and the Design and Construction of New Rail Crossings

Wisconsin Department of Natural Resources

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## What Does the Snowmobile Rail Crossing Law Do?

In 1993, the Legislature created a framework for permitting and regulating snowmobile rail crossings that are not located on public streets or roads. These are crossings that most of us would identify as private rail crossings.

The law outlines the process for snowmobile organizations, in cooperation with rail authorities, to follow in order to receive a permit to assist in the construction of rail crossings, maintain the crossings, and compensate and indemnify the rail authority for the construction and use of the crossing. Similarly, the law outlines the requirements for the maintenance of a crossing and the indemnification of a rail authority for an established rail crossing. Lastly, the law outlines the process for a rail authority to pursue closure of a rail crossing, whether or not the crossing is established by a permit.

## Who does this law apply to?

The law applies to a county that maintains public snowmobile trails, a snowmobile club or an alliance of 2 or more snowmobile clubs or counties. For the purposes of the law, these groups are called snowmobile organizations.

## What are the Basic Distinctions in this law?

There are two types of crossings addressed in this law:

- Established rail crossings, i.e. those crossings that have been used by snowmobiles for at least 5 winters in the last 10 years.

- Crossings constructed by a snowmobile organization in cooperation with a rail authority that require a permit from the Department.

The remainder of this guide will outline the important points for each of these major types of rail crossings.

## How to Use This Guide

This guide is arranged in six major sections and is color-coded for easier use.

- **General information about the law and to whom it applies**
- **Construction of a new rail crossing**
- **New rail crossing permit**
- **Maintenance of rail crossings and liability insurance**
- **Rail crossing closing, removal, and review of actions**
- **Appendix containing program references and forms**
CONSTRUCTION OF A NEW RAIL CROSSING

What is Required for a New Rail Crossing?

Snowmobile organizations will need a permit issued by the Department to construct a new crossing not located on a public highway. Each new crossing will require a separate permit. The following sections outline construction responsibilities of the snowmobile organization, the design standards, description of construction and installation of components associated with the construction of a new crossing.

What are the Limitations of Rail Crossing Construction for a Snowmobile Organization?

The portion of the snowmobile rail crossing that intersects, connects with, or touches upon the rail lines and the area that extends outward four feet from each outer rail, must be constructed by the rail authority or its contractor.

All other construction of the snowmobile rail crossing that is outside of the portion of the crossing that extends outward four feet from each outer rail is the responsibility of the snowmobile organization.

What are the Design and Construction Standards for New Rail Crossings?

The following are the design and construction standards for new snowmobile rail crossings:

- **Horizontal alignment.** The intersection between the snowmobile trail and the railroad track shall be as close as 90 degrees as possible, but may not be less than a 70-degree angle on either side of the track. The alignment within 30 feet of the outside rail on either side shall be a straight line.

- **Vertical alignment.** The surface, without snow, of the snowmobile trail approaching the crossing for a distance of 26 feet from 4 feet outside the nearest rail may not be higher than one foot lower than the top of the nearest rail or 1.5 foot lower than the top of the nearest rail.

- **Drainage.** Where the grade of the snowmobile trail approach descends toward the crossing, provisions shall be made to intercept surface and subsurface drainage and discharge it laterally. Routing of drainage may require ditches, culverts, french drains, piping, geotextile fabrics or combinations of these improvements.

- **Train speed.** Public snowmobile trail crossings may not be sited across rail lines where the maximum allowable speeds through the section of track exceed 69 miles per hour.

- **Sight distances.** The snowmobile rail crossing shall be located so that when stopped on a crossing approach at the crossbuck and posted Stop sign, the snowmobile operator
has a sight distance along the tracks in both directions, free of obstructions, to determine whether a train is approaching. The position from which the sight distance is measured is 15 feet outward from the outer rail on each side of the crossing.

The site distances for the following maximum allowable train speeds shall be minimum distances that clear vision is available in both directions to determine the approach of a train.

<table>
<thead>
<tr>
<th>Maximum Allowable Train Speed (mph)</th>
<th>19</th>
<th>29</th>
<th>39</th>
<th>49</th>
<th>59</th>
<th>69</th>
</tr>
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<tbody>
<tr>
<td>Distance Along Railroad from Crossing (feet)</td>
<td>240</td>
<td>480</td>
<td>720</td>
<td>960</td>
<td>1200</td>
<td>1440</td>
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**Please Note** Snowmobile rail crossings may not be sited where sight distances are less than specified above.

**What are the appropriate Signs for a New Crossing?**

**Responsibility**

The snowmobile organization is responsible for furnishing, installing and maintain in a legible conditions all signs identified below.

**Signs at the crossing**

A railroad crossing sign, commonly identified as a crossbuck, shall be used to notify the snowmobile operator of the railroad crossing. The crossbuck shall be 2 panels 24" long by 4.5" wide mounted perpendicular to each other at the midpoint of each with the legend RAILROAD and CROSSING, respectively. The sign color shall consist of white reflective background with black lettering. The size of the lettering shall be 2". The sign shall be double sided and constructed with commercially manufactured reflective sheeting applied to an aluminum or treated wood backing. Where physically possible, the crossbuck sign shall be located on the right hand side of the trail. Where circumstances do not allow the posting of the crossbuck on the right hand side of both approaches, the crossbucks may be posted back to back. The crossbuck shall be erected 10 feet outward from the nearest rail and no further from the trail edge than 6 feet. The panels of the crossbuck shall be mounted so that the panels cross approximately 7 feet above bare ground on a preservative treated 4" x 6" post with the 6" side parallel to the tracks. The post shall have a 2" reflective white panel on both sides extending from 6" below the intersection of the crossbuck blades to 6" above the anticipated level of snow. A minimum of one crossbuck is to be used on each approach to the crossing. An additional crossbuck may be posted on the left-hand side of the trail at the 10-foot distance from the nearest rail. If the number
of pairs of tracks is 2 or more, the number of pairs of tracks is to be indicated with 2 auxiliary placards. The first placard shall be a 4 ½" by 4 ½" square placard placed beneath the crossbuck with the legend indicating the number of tracks. The second placard shall be a 13 1/2" by 4 1/2" rectangular placard placed beneath the square placard with the legend TRACKS. Both placards shall have a 2" black number or letters on a reflective white background. A STOP sign that complies with NR.50.09 (4)(c) 3.b. shall be posted beneath the crossbuck at a level approximately 42" above the anticipated level of snow. An additional STOP sign may be posted on the left-hand side of the trail. Please refer to the following illustrations:

**Signs Prior to the Crossing**

Prior to the snowmobile rail crossing, the snowmobile trail shall be signed with an advance caution railroad crossing sign. This sign shall be a circular sign of minimum 12" diameter. Sign color will be a reflective yellow background with reflective black letter and legend. The letters will be 4' upper case and the black legend will be 2" in width. The sign will be placed in such a manner to enable a snowmobile operator to come to a safe stop at the crossbuck and STOP sign.
Approach Installation and Components

The approaches may be all aggregate or aggregate and asphalt combination. The height of the approach installed by the snowmobile organization shall match the height of the crossing established by the rail authority. Crushed aggregate shall be thoroughly compacted with a roller vibrator. Where asphalt is used in combination with a crushed aggregate base, the asphalt shall be a minimum thickness of 3", installed in 2 equal layers. Asphalt material used for an approach shall conform to Section 404, Wisconsin Department of Transportation DOT Standard Specifications for Road and Bridge Construction, 1996. Crushed aggregate shall be grade 2 or 3 in accordance with Section 304 of the same specifications.

Scheduling and Supervision Of Approach Construction

The snowmobile organization must schedule snowmobile rail crossing approach construction with the appropriate railroad authority and Diggers Hotline (800-242-8511). All work performed by the snowmobile organization within 25 feet of the track shall be under the direct physical supervision of the rail authority or with explicit permission from the rail authority to perform the work without direct physical supervision. The snowmobile organization's workers shall comply with the safety requirements established by federal law and the rail authority. The rail authority shall provide the snowmobile organization with a written copy of the rail authority's safety standards applicable to outside contractors who perform work on the rail authority's property.

Unused Materials

All unused materials from the construction of the portion of the crossing for which it is responsible must be disposed of by the snowmobile organization.

Contracting

A snowmobile organization may contract for the construction of the portion of the crossing for which it is responsible.

Questions on Maximum Train Speed

If there is a doubt as to the maximum allowable train speed and the resulting minimum clear site distance, please contact Diane Conklin at (715) 822-8583 or e-mail at Diane.Conklin@wi.gov
How do I apply for a Permit? Snowmobile organizations need to complete Form 8700-254, *Permit Application for a Snowmobile Rail Crossing* and forward to your regional community services specialist. In addition to basic information, the form will ask for the following attachments:

- A map showing the crossing location on a map with a scale of at least 1:500,000 (this is the scale used in the Wisconsin Atlas and Gazetteer)

- A site plan showing the railroad tracks and right-of-way, proposed trail corridor and alignment of crossing, the location of snowmobile trails that will connect with the crossing, outline of sight distances and any limitations, gate/barrier locations, crossbuck/sign locations, any other roads or development, lakes or streams and property boundaries if within 100 feet of the crossing. The site plan must be at a scale of 1 inch equals 1 feet or larger.

- Construction plans showing all proposed grading and including all of the following:
  1. Longitudinal section on the centerline of the snowmobile trail through the railroad tracks extending 30 feet on either side. This section should include the elevation of approaches (both 4’ from each outer rail and 30 feet from each outer rail), location of drainage structures, if any and crossing approach surface. The horizontal scale of this sectional drawing must be at a scale of 1 inch equals 5 feet or larger while the vertical scale may be exaggerated.

  2. Cross section(s) of the snowmobile trail outside the railbed reflecting grade changes and modifications to drainage patterns.

  3. A list of materials that will be used.

  4. Narrative description of any topography or vegetative management issues in obtaining and maintaining clear sight distances.

- A copy of the liability insurance certificate. The snowmobile organization must carry at least $2,000,000 in liability insurance coverage that indemnifies the rail authority for damages resulting from the design, construction, existence, maintenance and use of the crossing. Liability insurance indemnifying a rail authority that is a transit body shall also indemnify the owners and operators of any railroad using the tracks of the rail transit body.
• A permit review fee of $150.00

**The Application Process**

The Department will review the application for completeness and will return it within 15 days if it is judged not to be complete or sufficiently detailed to make a determination of whether to approve or deny the application.

If the application is complete, the Department will forward a copy of the application to the appropriate agent of the rail authority and will also send to the applicant snowmobile organization notice that a copy of the application was sent to the rail authority.

From this point forward, the application may be approved or denied without a hearing or as a result of a hearing. The following outlines the different procedures.

• The Department has 90 days after forwarding a copy of the application to the rail authority to approve the application. The Department must determine if the following conditions have been met:

  - Within 30 days after the date on which the Department sent the copy of the application to the rail authority, the applicant provided a written offer to discuss the advisability or feasibility of the proposed crossing.
  
  - The applicant snowmobile organization furnished the Department with a copy of the written offer.

**Important**

  - The rail authority does not file an objection with the Department within 60 days of receiving a copy of the application, or does not object to any modification of the application mutually agreed upon by both the rail authority and snowmobile organization. If a modification is agreed upon, it is important that the Department be informed of the change(s) to the application.

  - The application complies with the rules established by the Department.

If all the conditions are met, the Department will issue the permit.

OR

**Important**

• The Department will hold a hearing if the rail authority files an objection within 60 days after receiving notice of the application and the objection contains all of the following:
- a statement that after discussing, in good faith, the advisability and feasibility of the proposed rail crossing with the applicant, the rail authority opposes the application.

- a statement of the rail authority's basis for objection.

**Important**

The Department will give notice of the hearing to the applicant, the appropriate rail authority and to the Office of the Commissioner on Railroads. The hearing will be a contested case hearing; the Department's order issue approving or denying the permit will be a final order subject to judicial review.

State law requires the Office of the Commission on Railroads (OCR) to give testimony either orally or in writing at the hearing.

After conducting the hearing and giving consideration to all testimony, the Department will issue that permit if it finds that the proposed crossing is advisable and feasible. In making its finding, the Department will have to consider at a minimum the following factors:

- whether the proposed crossing would pose a substantial danger to public safety.

- whether a snowmobile rail crossing that is located near the proposed crossing provides an adequate crossing for snowmobiles

- whether the proposed snowmobile rail crossing would have a substantial adverse effect on railroad operations.

- whether the proposed crossing conforms with the requirements promulgated by the Department.

**The Permit**

If the Department issues a permit to an applicant snowmobile organization, the rail authority shall construct that portion of the crossing that is on the track and that portion that extends 4 feet from each outer rail.

Upon issuance of the permit, the applicant shall pay the rail authority $1,500 within 30 days of the permit issuance date. This payment is to compensate the rail authority for the costs to construct the crossing and for the cost of using the crossing by snowmobile operators. Beginning in 2004, this fee will be adjusted based on the consumer price index.

There is no renewal term for the permit.
Permit Revocation

The Department may revoke a previously issued permit if:

- the snowmobile rail crossing is not constructed in compliance with NR 6.43 and 6.49, Wis. Admin. Code.

- the snowmobile organization does not maintain the required level of liability insurance indemnifying the rail authority.

- the snowmobile rail crossing is not maintained for use by snowmobiles for at least 5 winters in any 10 year period.
What are the Maintenance Standards?

A snowmobile organization maintaining a crossing subject to a permit or an established rail crossing must maintain the crossing in the following manner:

- A snowmobile organization shall not perform any maintenance work on the portion of the snowmobile rail crossing that is within 4 feet of each outer rail with the exception of snow removal work outlined below. The maintenance of that portion of the crossing will be performed solely by the rail authority.

- Adequate drainage along the snowmobile trail approaching the rail crossing and that portion of the crossing for which it has responsibility must be maintained, both in the snowmobile and non-snowmobile season to prevent the pooling of water or the saturation of the track subgrade.

- The snowmobile organization shall be responsible for furnishing, installing and maintaining in a legible condition all signs at the crossing: crossbucks, placards, and snowmobile STOP, and all signs prior to the crossing and the advance railroad crossing warning sign. Sign specifications and posting requirements are described in the section on the construction of a new crossing. These signs must be inspected on a periodic basis to ensure their presence.

- Portions of the approach outside of the area 4 feet from each outer rail that become worn or damaged as a result of use shall be repaired as soon as practical under the same material and installation constrains as the installation of the original approach.

- During the winter season, no snow may be compacted over the surface of the crossing by snowmobile trail grooming machinery. Any snow deposited on the rail crossing by the grooming machinery shall be removed manually by the operator of the trail grooming machinery after the machinery after the machinery is clear of the crossing. The surface of the rail crossing for this purpose is considered the area within 4 feet outward from each outer rail.

- For a crossing established by a permit, the snowmobile organization will be responsible for erecting a gate or barrier on both sides of the crossing and securing the gate or barrier to prevent the use of the crossing by other vehicles when not actively used for snowmobiling. The gate or barrier must span the entire width of the crossing and be located at the same location as the existing right-of-way fence (whether present or not). The gate or barrier must be signed with the standard snowmobile barrier markers.
Liability Insurance
A snowmobile organization must certify to the department and the appropriate rail authority that it maintains liability insurance to indemnify the applicable rail authority for damages from the design, construction, maintenance, existence or use of an established rail crossing or a snowmobile rail crossing for which a permit has been issued by the Department.

The snowmobile organization need not provide liability insurance to indemnify the rail authority for injuries sustained by a person engaged in a recreational activity if the rail authority would be immune from liability for those injuries under the recreational landowner liability statute, s.885.52, Stats.

The snowmobile organization shall designate the applicable rail authority as a named insured and if the rail authority is a rail transit body, the insurance shall also indemnify the owners and operators of any railroad using the tracks of the rail transit body.

Regardless of the number of established or permitted rail crossings that a snowmobile organization maintains, the amount of liability insurance required must be at least $2,000,000.

A snowmobile organization must provide proof of insurance to the Department and applicable rail authority annually by December 1 of each year.

How do I Make the Annual Certification
Complete Form 8700-255, Certification of Liability Insurance for Established and Permitted Snowmobile Rail Crossings. Attach a copy of the insurance certificate and a locator map of the crossing location (map to have a scale of at least 1:150,000) and forward copies to both the Bureau of Community Financial Assistance, Department of Natural Resources, Box 7921, Madison, WI 53707-7921 and the appropriate rail authority. The certification form will ask you to identify the name of the rail authority and the location of each crossing.
**Snowmobile Rail Crossing**

**Closing and Removal**

A rail authority may close or remove a snowmobile rail crossing if it enters into a written agreement with a snowmobile organization that holds a crossing permit issued by the Department or maintains an established snowmobile rail crossing.

A rail authority may petition the Department, without requesting or obtaining a written agreement from a snowmobile organization, to close or remove a snowmobile rail crossing.

Upon receiving such a petition, the Department will hold a hearing after giving notice to the rail authority, the snowmobile organization and the Office of the Commissioner of Railroads. The hearing will be a contested case hearing; the Department's order shall be a final order subject to judicial review.

State law requires the Office of the Commissioner of Railroads (OCR) to give an oral or written opinion on whatever the snowmobile crossing should be closed or removed.

After conducting the hearing and giving weight to all testimony, the Department shall grant a rail authority's petition to close or remove a crossing if it is finds that any of the following apply:

- The snowmobile rail crossing has not been maintained for use for at least 5 winters in the last 10 winters preceding the year in which the petition was filed.

- The snowmobile rail crossing poses a substantial danger to public safety.

- Another snowmobile rail crossing is located near the crossing that is the subject of the petition and the other crossing provides an adequate and accessible crossing.

- The snowmobile rail crossing has a substantial adverse effect on the operations of the rail authority.

**Review of Actions**

Either a snowmobile organization or a rail authority may request the Department to review any failure of a rail authority or snowmobile organization to comply with state statute or administrative rule regarding rail crossings. The Department will decide the matter after conducting a contested case hearing. If the Department finds that either the snowmobile organization or the rail authority failed to comply with the statute or rule, it will issue an order directing either party to take appropriate action to comply.
DNR Community Services
Specialists

Rail Crossing Forms

Certification of Liability Insurance for Established Snowmobile Rail Crossings, Form 8700-255

Permit Application for Snowmobile Rail Crossing, Form 8700-254.
For further information and assistance in preparing rail crossing certification or permit applications:

**Northern Region**
- Ed Slaminski
- 810 W. Maple St
- Spooner WI 54801
- (715) 635-4130

- Pat Zatopa
- 107 Sutliff Avenue
- Rhinelander WI 54501
- (715) 365-8928

**West Central Region**
- Lavane Hessler
- 1300 Clairemont Ave.
- PO Box 4001
- Eau Claire WI 54702
- (715) 839-3751

- Gary Hanson
- 2984 Shawano Ave
- Green Bay WI 54313-6727
- (920) 492-5823

**South Central Region**
- Tim Panzer
- 3911 Fish Hatchery Rd
- Fitchburg WI 53711-9690
- (608) 275-3219

- Tom Blotz
- 2300 N. Dr. Martin Luther King
- Milwaukee WI 53212
- (414) 263-8610