



ALASKA RAILROAD INTEGRATED VEGETATION MANAGEMENT

FREQUENTLY ASKED QUESTIONS (as of 6/25/2006)

What is the purpose and need for using chemical weed control products to manage vegetation on Alaska Railroad property?

- Comply with federal regulatory requirements to control vegetation;
- Maintain safe walking areas for employees to avoid slip, trip, and fall injuries;
- Eliminate plants and roots that impede drainage, foul* ballast, and cause deterioration of track conditions (*foul refers to the obstruction or interference with train movement);
- Allow track inspectors to properly complete visual inspections of ties, track, and fasteners;
- Remove potential fuels that can cause wild land fires and threaten timber structures such as bridges and trestles;
- Maintain proper sight lines at crossings, and keep vegetation from obstructing track flags, mileposts, and other signage critical to safe train movement;
- Protect capital investments recently completed on the Railroad's track and infrastructure; and
- Prevent spread of invasive, noxious weeds.

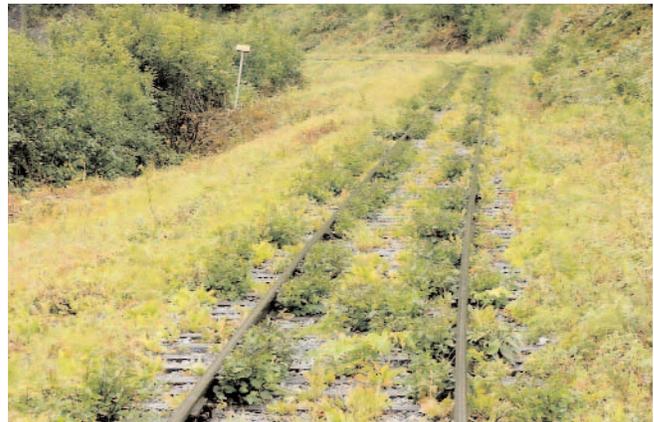
Why do we need to use weed control?

Methods we use now — mechanized rail-based brushcutters, off-rail hydroaxing, wayside manual cutting — are effective only within limited ranges. None of them gets to the key problem — vegetation growing between the rails and to the ends of the crossties. So-called “alternative methods” such as steam, infrared, hot water, and burning have been tested extensively but proven ineffective. The size of the problem is overwhelming... 500 miles of mainline and branch track, 100 miles of yard track, and weeds that re-grow weekly all summer long. The railroad needs effective, enduring area coverage.

Why do we need to use weed control now?

The cumulative effects of failing to adequately control vegetation over the past 20 years is clearly demonstrated in current poor tie condition, battered joints, poor footing around switches and in yards, and obstructed signage. Small to medium sized plants have root systems between the rails, while larger woody vegetation on the shoulders all combine to hinder drainage, creating the problems and associated risks noted here.

Over time, unchecked vegetation also increases derailment risk by degrading the crossties, rail fasteners, hard-rock ballast and subgrade that keep the track structure rigid. The railroad and the federal government have invested heavily in new crossties, welded rail, new ballast and straightened track over the past decade — all of which strengthen the railroad and decrease derailment risk — but the life and effectiveness of these improvements will diminish if vegetation is not controlled.



Overgrown weeds on the track bed are nearly impossible to get rid of with non-chemical methods.

What is at risk?

Employees working on or around the track are at risk of injury due to slip, trip and fall hazards. Unchecked vegetation presents a tripping risk by itself, but plant growth also obscures hazards hidden underneath.

Approximately 40% of ARRC freight is classified as hazardous material, and ARRC transports nearly 500,000 passengers a year. Maintaining the track and roadbed to the highest standards is critical to ensuring passenger safety and environmental integrity.

Where will the Alaska Railroad apply weed control?

Weed control products will be applied on Railroad operating property (rail yards, spurs, sidings, etc.) and along the Railroad mainline and branch right-of-way approximately 15 feet out from either side of the track centerline. Depending on the size and type of vegetation present at crossings, the ARRC's contractor will also use weed killers to control or eliminate vegetation that obscures sight lines at some highway and road crossings.

Who monitors this work?

Weed control product types and application methods are regulated by both federal and state governments. The Railroad is accountable, through a state-issued permit, for the proper storage and use of the weed control products.

Will I have a chance to review and comment on the permit?

The Alaska Department of Environmental Conservation (ADEC) is responsible for developing and issuing a permit. Public comment is actively solicited as part of the permit process. In addition to public comment periods, ADEC has the authority to require public hearings.

In addition to the public hearings, written comments can be submitted to ADEC at the address below. Comments must be received on or before August 14, 2006.

FOR MORE INFORMATION CONTACT:
Department of Environmental Conservation
Pesticide Program
555 Cordova Street
Anchorage, AK 99501
Contact: Sandra M. Woods
Phone: (907) 269-7802
Fax: (907) 269-7600
Email: sandra_woods@dec.state.ak.us

Where and when will public hearings be scheduled?

Several public hearings have been arranged, as outlined below. Each of these public hearings will be held from 4:30 to 6:30 p.m. Hearings will start with a brief presentation, followed by public comment.

PUBLIC HEARING LOCATIONS:

- ANCHORAGE: Tuesday, July 11
Marriott Downtown Hotel
7th Avenue and "I" Street
- NENANA: Wednesday, July 12
Nenana Civic Center, 723 N. "A" Street
- FAIRBANKS: Thursday, July 13
City Council Chambers, 800 Cushman Street
- SEWARD: Monday, July 17
Seward Marine Center/RM Rae Education Bldg
125 3rd Avenue
- MAT-SU VALLEY: Tuesday, July 18
Evangelo's Restaurant
2530 E. Parks Hwy, Wasilla
- TALKEETNA: Wednesday, July 19
VFW Post 3836, Veterans Way and D Street
- HEALY: Thursday, July 20
Tri-Valley Community Center
0.5 Mile Healy Spur Road



Optimally, the Alaska Railroad track would be free of weeds, providing an uncompromised platform for train movement.

What is the timeline for the permit process?

Public hearings are scheduled for July 11 – 20 in seven communities and the deadline for public comment is August 14. The ADEC will review comments made during the hearings and submitted during the comment period, after which ADEC will issue a formal decision.

What is timing for the chemical portion of the Integrated Vegetation Management Program?

It is possible that a permit could be issued in time to apply the chemical weed control in fall 2006. However, it is more likely that the Alaska Railroad's first application will take place in spring 2007.

How will I know if there are weed control products used in a given location?

Before and after application, the Railroad will post notices at road crossings and other areas where the public could come close to the right-of-way. The railroad right-of-way (i.e., the tracks and the land within 100 feet of either side of the track centerline) is closed to the public for safety reasons.

What about streams, lakes, and other areas that are important to fish and wildlife?

When applying weed control near waterways, the Railroad will adhere to buffer distances specified by the product manufacturer and government agencies. Weed control products available for use today, along with contemporary application methods, are designed not to "carry" outside the target area.

How will subsistence users in the areas know their food is safe?

When used according to manufacturer directions and in the concentrations prescribed by the manufacturer, today's weed control products will break down rapidly after contacting soil, and do not pose any threat to fish, wildlife, or humans. (For more information, visit some of the web sites listed at the end of this fact sheet).

Are there health risks associated with coming into contact with these products and how long does that risk persist?

First, the weed control products won't be applied in areas normally visited by people: The application zone is primarily from one end of the ties to the other. But more important, when used according to the directions, the products have been determined by the federal government to pose little to no risk to human health or the environment. To avoid any unwanted contact with the product, the manufacturers recommend that people not come into an area that has been treated until the product has dried, which can be anywhere from 5 to 45 minutes depending on the weather.

If you look at the product labels and/or the Material Safety Data Sheets (MSDS), they do list potential health risks and list precautions for handling, but it's important to note the following: Health risks listed on the product labels and MSDS apply only to the undiluted product, and are based on repeated, direct contact. They are directed at people who are mixing and handling the products. All three of the products the railroad plans to use will be heavily diluted; for example, in a 40-gallon batch, the weed control product makes up less than a quart of the solution. The EPA and the State have determined that the dilutions prescribed by the manufacturers pose little to no risk.

For further information, please consult the fact sheets, Material Safety Data Sheets (MSDS) product labels and studies listed at the end of this fact sheet.

What type of weed control and other products will be used?

We will use general use herbicides Razor Pro® (active ingredient Glyphosate) and Solution Water Soluble (SWS, active ingredient 2,4-D), restricted use herbicide Oust® Extra (Sulfometuron methyl and Metsulfuron methyl), and Alenza™ Drift Retardant. The first two products are commonly available over-the-counter in home and garden stores under various brand names including Round-up and Weed-B-Gone. Three quarts of Razor Pro and 18 ounces of SWS will be applied per acre of right-of-way. Oust Extra is available for professional use only. Three ounces will be applied per acre of right-of-way. (Note: an acre is roughly equivalent to about a mile of the railroad track bed - i.e. minimum bed width is from one end of a tie to the other end). The formulations, concentrations, application methods and handling requirements are listed in the railroad's state issued permit.

Why doesn't the Alaska Railroad use other methods to control vegetation?

We do now, and will continue to do so. For the last decade, ARRC has invested over \$5 million in experimental, non-chemical methods but none have been effective. We will continue to use mechanized/manual methods in conjunction with chemicals for an integrated vegetation management strategy.

What do other railroads do?

The same thing we propose – a mix of mechanized and chemical control. To our knowledge, no North American railroad has adopted a completely or primarily non-chemical weed control program.

How will the Railroad apply the weed control products?

A licensed contractor will use a special vehicle equipped to travel on the rails. Low-volume, low-pressure ground-directed attachments will be used to apply the weed control products. This method is designed to limit potential for wind to carry the chemicals away from the target area. There may be additional spot application by licensed contractors using hand-operated pump-spray tools.

Will an Alaska Railroad representative accompany the licensed contractor during the application process?

An Alaska Railroad representative, who is a licensed applicator, will accompany the Railroad's contractor at all times during application activities. There will be additional ARRC supervision from the district in which the work is being done.

What about aerial spraying?

Aerial spraying will not be used.



A specially-equipped truck directs weed control products directly at the track bed.



The DBI Company is an industry leader in railroad vegetation management nationwide.

What is the Federal Railroad Administration's position on the use of weed killers?

The FRA requires that railroads keep their tracks free of weeds. The FRA has repeatedly fined the ARRC for excessive vegetation, which is a safety violation.

What are invasive weeds and what do they have to do with the railroad?

Invasive weeds are non-native weeds that have become so widespread that they threaten local ecosystems. The invasion of exotic weeds is one of the greatest threats to natural ecosystems in the western United States and Alaska. The Alaska Railroad right-of-way is a major vector for the spread of some of these weeds. Keeping the right-of-way weed-free is paramount in controlling the spread of invasive weeds throughout Alaska.

Where can I find product-specific information about the weed control products the Railroad plans to use as part of its vegetation management plan?

Material Safety Data Sheets (MSDS) and Product Labels are available from the manufacturers' web sites. Additionally, Fact Sheets are available from the Environmental Protection Agency, as well as from other recognized and respected sources.

Razor Pro®

- Manufacturer MSDS and Label — <http://www.cdms.net/manuf/1prod.asp?pd=6902&lc=0>
- EPA RED Fact Sheet for Glyphosate — <http://www.epa.gov/oppsrrd1/REDS/factsheets/0178fact.pdf>

Solution Water Soluble®

- Manufacturer MSDS and Label — <http://www.cdms.net/manuf/1prod.asp?pd=912&lc=2>
- EPA RED Fact Sheet for 2,4-D — http://www.epa.gov/oppsrrd1/REDS/factsheets/24d_fs.htm

Oust Extra™

- Manufacturer MSDS — http://msds.dupont.com/msds/pdfs/EN/PEN_09004a2f8061d37c.pdf
- Manufacturer Label — <http://www.dupont.com/ag/us/prodinfo/prodsearch/information/H65144.pdf>
- Oregon State University Fact Sheets on Oust Extra's two chemicals.
 - Sulfometuron-methyl Fact Sheet — http://www.oregon.gov/ODF/PRIVATE_FORESTS/docs/chem/sulfometuronmethyl.pdf
 - Sulfometuron-methyl Fact Sheet — http://www.oregon.gov/ODF/PRIVATE_FORESTS/docs/chem/metsulfuronmethyl.pdf

What other information is available about the topic of vegetation management and weed control products?

Third-party information from public and private universities, professional weed management organizations, state and federal government agencies are easily found on the Internet. Some of the most complete information sites include:

- University of Iowa Department of Weed Sciences — www.weeds.iastate.edu/
- U.S. Forest Service — <http://www.fs.fed.us/>
- State of California Pesticide Management Agency — <http://www.cdpr.ca.gov/>
- Cornell University Institute for Comparative & Environmental Toxicology — <http://www.toxicology.cornell.edu/>
- University of California - Davis (UC Davis) Weed Research and Information Center — <http://wric.ucdavis.edu/>
- Weed Science Society of America — <http://www.wssa.net/>