



ALASKA RAILROAD

Track & Yard Vegetation Management: About AquaMaster® and AgriDex®

The Alaska Railroad (ARRC) proposes the herbicide AquaMaster® because: 1) the active ingredient glyphosate poses virtually no threat to people or wildlife when properly applied; and 2) it is approved for use in and around water. AquaMaster® is designed for use with a surfactant; the surfactant AgriDex® is also approved for aquatic applications.

How it Works

- Glyphosate disrupts the *plant* growth enzyme (EPSP synthetase), which is *not* present in animals or humans.
- AgriDex® evenly spreads and adheres the herbicide onto the plant's leaves and stems. Glyphosate is absorbed through the leaves; it is not absorbed through the roots.

Toxicity

- Glyphosate-based herbicides have a very low toxicity to wildlife.
- *All* substances are toxic at high enough doses and exposure. Even water is poisonous if too much is ingested. When used according to manufacturer label instructions, AquaMaster® / glyphosate poses virtually no toxicity risk.
- The U.S. Environmental Protection Agency, U.S. Forest Service, Health Canada, European Commission and World Health Organization scientists, among other academic and regulatory researchers, agree that glyphosate poses no unreasonable risk to people, wildlife or the environment.
 - **Toxicity Ranking:** Toxicology rankings classify glyphosate as slightly toxic; and less toxic than table salt. AgriDex® is classified as practically non-toxic to fish, wildlife and humans.
 - **Genetic Toxicity:** Overwhelming evidence indicates glyphosate does *not* cause genetic mutations or damage.
 - **Cancer Connection:** Regulatory agencies and scientific organizations conclude glyphosate is *not* a carcinogen.

Environmental Impact

- Glyphosate is used to protect and restore habitats threatened by invasive, non-native vegetation.
- Glyphosate binds tightly to soil and is unlikely to leach outside the target area or contaminate ground water. It is readily broken down by soil microbes. The University of Alaska Fairbanks herbicide research first-year results indicate glyphosate degrades rapidly in Alaskan soil and climate and does not migrate to a significant degree in the soil.



Dandelion is one invasive weed that proliferates between the ties and rail. When left unchecked, the railroad corridor acts as a vector for distributing such noxious and invasive weeds.

AQUAMASTER®
Herbicide by Monsanto

AquaMaster® is approved by the Environmental Protection Agency for use in and around water.

AGRI-DEX®
A Crop Oil Concentrate

AgriDex® is a nonionic surfactant that helps to evenly and effectively spread the herbicide.

