

When and How Does Vegetation Management Occur?

Safety - Electricity can be deadly, that's why only qualified line personnel may perform work near energized conductors. Landowners should never attempt to trim or remove tree limbs near or adjacent to any power lines. If you're concerned about a tree that appears to be too close to a power line, please contact us at 1-888-624-9376.

Tree Removal - In our efforts to comply with international regulation and to better ensure reliability, our Transmission Line Vegetation Management Program emphasizes tree removal to promote effective long-term control. In many cases, this means removing trees in areas where trees have only been trimmed in the past.

Vegetation Clearing - Manual and mechanized clearing methods are used when the vegetation has become too tall for herbicide applications.

Herbicide Application - Herbicides are applied to control the root systems of deciduous woody-stemmed vegetation and to reduce the cost of future maintenance, by reducing future workloads. All Herbicide use is reviewed and regulated by the Pesticide Section of the Environmental Assessment and Licensing Branch of Manitoba Conservation. The herbicides are applied by licensed applicators.

Debris Cleanup - Debris that results from our clearing activities is typically left on the rights-of-way to naturally decompose and return nutrients to the soil and reduce the possibility of soil erosion. Any brush that falls into roadways, waterways, fences, lawns or pastures or other maintained areas is collected and disposed of.

Danger Trees - "Danger Trees" are large trees growing along the edge of the right of way that are tall enough that if they fell, have the potential to hit the line. Not all "Danger Trees" are removed, but some are evaluated according to species, growth patterns, location, structural defects, disease and insect damage, and decay. A "Danger Tree" that shows defects according to these criteria is classified as a "Hazard Tree", which requires immediate removal.

The Manitoba Hydro Act

Section 24 of the Manitoba Hydro Act outlines the responsibility of Manitoba Hydro to trim and fell trees where they pose a risk to the public or equipment of the corporation or otherwise constitute a hazard.

For further details please refer to The Manitoba Hydro Act: www.web2.gov.mb.ca/laws/

Transmission RIGHT OF WAY

Tree Clearing & Maintenance



Sometime soon, vegetation growing around the transmission powerline near your property will be receiving maintenance. This brochure addresses questions you may have about the work being done near your home.

Why manage vegetation?

North America demands a safe, reliable electric grid, and Manitoba Hydro's transmission lines are a significant contributor to this continental system. In Manitoba, almost 12,000 kilometers of transmission circuits help move electricity from hydro generating stations in northern Manitoba and on the Winnipeg River to customers in Manitoba and beyond.

Recognizing the need to safeguard the reliability of our transmission delivery system, and your electric service, our vegetation management program addresses the need to manage the growth of trees around our transmission facilities, while respecting the natural environment that surrounds them.

When vegetation comes in contact with or grows close enough to the conductors (wires) there is risk of electrical arcing or flashover. This can cause wide-spread power outages and/or fires. Vegetation control ensures the safety of the public, of private property, as well as reliable electrical service. Vegetation control is also necessary to maintain access to the right-of-way for both emergency and routine maintenance of the lines.

Federal Requirements

In August 2003, a major power outage struck southeastern Canada and northeastern United States. Investigators have determined that a tree that had come in contact with a transmission line was the root cause of the blackout.

As a result of that event, international standards, with substantial penalties for non-compliance, were created governing vegetation management practices for lines that are considered part of the international transmission grid. The North American Electric Reliability Corporation (NERC), with input from industry and other stakeholders, under the direction of the Federal Energy Regulatory Commission (FERC), developed standard, FAC-003. The standard mandates, among other requirements, a robust vegetation management program that ensures that the minimum clearance distance between transmission lines and the nearest vegetation are not violated.

To conform to this standard and better ensure the reliability of the transmission system, Manitoba Hydro's policy is to encourage compatible, low-growing species to remain. Although there is no guarantee, we do attempt to work with landowners to determine if trees and other vegetation deemed compatible with the safe operation of the line may remain.

Integrated Vegetation Management (IVM)

At Manitoba Hydro, Integrated Vegetation Management (IVM) involves a written management plan that utilizes best management practices endorsed by the North American Transmission Forum. Prior to vegetation management, rights of way are patrolled and management methods are selected. Methods are determined according to safety, health, environmental sensitivities, efficiency and cost. Methods of control include chainsaws, brush saws, mechanical mowing/mulching, herbicide applications, and land-use conversion. Herbicide applications are intended to selectively remove tall growing tree species, allowing low growing species to thrive. This early successional habitat has been proven as beneficial

to wildlife. If you are the type who spends time tending your lawn or garden, you know controlling weeds is a tough job. Imagine the problems Manitoba Hydro has with the brush and invasive weeds along our thousands of kilometers of transmission powerlines. Selectively controlling trees along powerlines and other rights-of-way helps keep the power on. It ensures safe and easy access for service and maintenance needs, and also preserves and even enhances the natural surroundings - including wildlife habitat - for all to enjoy.

Trimming and cutting while important in maintaining powerline rights-of-way often trade one problem for another. Cutting only removes plant tops (stems, branches and leaves) - the root systems remain intact. This promotes rapid resprouting and spreading of some species. Later, where one tree had grown, several more grow back. Herbicides, on the other hand, control the entire plant (including the roots). This eliminates the need for frequent mechanical treatments, like tree trimming and mowing. Herbicide applications mean less erosion, soil compaction and ruts caused by heavy machinery. In a 50-year ongoing study, Purdue University and Pennsylvania State University researchers have studied differences between selective herbicide use and mechanical methods on powerline rights-of-way. Results show that the selective use of herbicides enhance wildlife habitat by promoting grasses, forbes, low-growing shrubs and other ground cover that birds, moose, deer, small animals, bees and butterflies prefer.

If you have a question or concern about our transmission right of way vegetation management program, please contact us at **1-888-624-9376**.