The new CEPA and Virtual Elimination

What is "virtual elimination"?

Virtual elimination is the reduction of releases to the environment of the most dangerous toxic substances to a level below which these releases cannot be accurately measured.

Virtual elimination of the most dangerous toxic substances is at the core of Canada's Toxic Substances Management Policy, a leading-edge policy among industrialized countries. By putting elements of that policy and the special regime for virtual elimination into CEPA 1999, Canada is moving ahead of other countries, including the United States, in dealing with these toxic substances.

Why include "virtual elimination" in this legislation?

Even minute releases of certain toxic substances to the environment can create problems that are extremely costly or impossible to correct. This is particularly true of substances that are:

- toxic as defined under CEPA;
- primarily the result of human activity;
- persistent — take a long time to break down; and
- bioaccumulative — collect in living organisms and end up in the food chain.

For example, the insecticide DDT was introduced into Canada in the 1940s and was responsible for causing drastic reductions in many bird populations, especially those at higher levels in the food chain.

In spite of the ban in Canada on all major uses of DDT in the 1970s, bald eagles are still not nesting in large numbers on the shores of the Great Lakes. Suitable habitat is available, but it is believed that remaining low concentrations of DDT and PCBs in the Great Lakes are partly to blame for the eagles' failure to nest.

Because we cannot accurately predict the precise levels at which these substances pose a significant risk, the long-term goal of virtual elimination is necessary to protect the environment and health of Canadians.

Will virtual elimination impose an unachievable burden on people who release persistent, bioaccumulative toxic substances?

No one is being asked to do the impossible. Given how dangerous these substances are, people are being asked to take responsible action.

Before regulations are put in place, the Ministers of the Environment and Health must first consider risks to the environment and human health as well as social, economic and technical factors.

This allows for interim targets and appropriate schedules to achieve the ultimate objective of virtual elimination.

Canada

Over the next decade, as we examine all of the 23,000 substances in commerce in Canada, it is estimated that a small number will be slated for virtual elimination.

Managing the risks posed by substances subject to virtual elimination

Implementing virtual elimination under CEPA involves a series of steps. First, a substance designated for virtual elimination is added to the Virtual Elimination List, and the Level of Quantification is specified (the lowest concentration that can be accurately measured using sensitive but routine sampling and analytical methods).

Next, release limits are proposed. These take into account social, economic and technical factors as well as environmental and human health risks. Virtual elimination plans can be required from people who contribute to the risk posed by these toxic substances. Information in these plans and input from other sources will be used to help prescribe release limits in regulations and propose prevention and control regulations and other instruments. These regulations and instruments will specify the dates on which the preventive and control actions are to take effect. Along with the regulations, the Minister can describe additional measures to achieve virtual elimination and summarize the reasons for doing so.