

# EXTRACTIONS



a newsletter from **O'CONNOR ASSOCIATES**

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## **ALBERTA ACTS**

Alberta's Environmental Protection and Enhancement Act and its accompanying regulations became law on September 1, 1993. According to Alberta Environmental Protection, the new Act:

- helps the public to participate in decisions that can protect and enhance the environment.
- increases public access to information on the environment.
- establishes a legislated environmental assessment process.
- allows for the creation of an integrated, one-window approval process that recognizes the interdependence between air, land and water.
- allows the development of market-based approaches, such as tradeable emission permits and recycling incentives, for achieving environmental protection goals.
- requires the reporting and cleaning up of spills.
- includes provisions for cleaning up contaminated sites.
- provides a wide range of measures to ensure the timely and effective enforcement of environmental regulations.
- provides penalties of up to \$1 million in fines and two years in jail for environmental offences.
- exposes corporate officers and directors and public officials to liability for environmental offences.

The Act consolidates Alberta's environmental legislation by replacing eight separate Acts dealing with agricultural chemicals, beverage containers, clean air, clean water, groundwater development, hazardous chemicals, land surface conservation and reclamation, and litter.

Begun in January, 1990, the rewriting took less than 4 years, a remarkable achievement considering the extent of public participation in the process.

[from *A Guide to the Environmental Protection and Enhancement Act*]

## **B.C.'S DOING IT, TOO**

British Columbia started a similar process in May, 1992, to rewrite its environmental protection legislation. However, unwilling to wait for the new Environmental Protection Act, the B.C. legislature has amended existing legislation. For example, the revised Waste Management Act:

- assigns responsibility for clean-up of contaminated sites.
- authorizes B.C. Environment regional managers to issue pollution prevention orders. Previously, the managers could only issue abatement orders after the pollution had occurred.
- delegates to local governments the authority to enforce regulations controlling underground storage tanks.

In other measures, B.C. Environment has reduced regulatory paperwork but toughened controls on open burning.

Some specific areas currently under review in the five-year action plan are:

- a clean air strategy,
- regulation of CFCs and HCFCs, and
- eventual elimination of beehive burners with alternate uses for wood residue.

[from BC Govt. press releases]

## **LOW-TECH SOLUTION**

"A low-tech solution to a high-tech problem" is how Richard Manbiot refers to Pronatur, a solvent he developed to replace 1,1,1-trichloroethane. The new solvent is a blend of natural oils from orange peels and inexpensive, inert paraffin. Edward Billington & Sons (Liverpool, U.K.) bought the rights to the solvent and are now producing it. Pronatur cleans oil & tar from surfaces including human skin. It also absorbs oil to form a solution that floats, making it easier to mop up oil from spills.

[from *Financial Times*, June 21, 1993]

## **OZONE-DEPLETING SUBSTANCES**

In response to the 1987 *Montreal Protocol on Substances that Deplete the Ozone Layer*, B.C., Alberta, and Saskatchewan have introduced regulations to control ozone-depleting substances (ODS). B.C.'s regulations currently go further than their Alberta equivalents in several areas since they:

- explicitly prohibit use of CFCs in new auto air conditioners after 1995 or for recharging existing air conditioners after 1997.
- require training for any person selling or servicing products containing ODSs.
- require sellers to accept CFCs and halons for recycling.
- list 34 prohibited HCFCs.

This August, Saskatchewan also introduced regulations that prohibit manufacture or sale of products containing ODSs after January 1, 1994.

[from *Alberta Environmental Law Centre News Brief*, Vol. 8, No. 2, 1993 and Saskatchewan Govt. press releases]

## **SEVEN-TO-ONE**

Labatt's Alberta Brewery now uses only 7 bottles of water to produce a bottle of beer. Fifteen years ago they used 15 bottles of water. Labatt's cites employee awareness and education as the key to reducing water consumption.

[from *Alberta Water Well Drilling Assoc. Newsletter*, August, 1993]

## **OUT OF THE BOX**

Preliminary studies show that riboflavin, a B vitamin present in breakfast cereals, and riboflavin tetraacetate (RTA) are photosensitizers that may be useful in water treatment. Richard A. Larson and a team of researchers at the University of Illinois (Urbana) Institute for Environmental Studies and Department of Civil Engineering based their studies on groundwater collected near an abandoned coal gasification plant. They found that RTA is more stable photochemically than riboflavin and may be a promising agent for treating water contaminated with organic compounds. Like any photosensitizer, the RTA absorbs light energy, transforms it into chemical energy, and transfers that energy to otherwise photochemically unreactive substances. Thus RTA and light may hasten the degradation of hazardous contaminants in groundwater or wastewater.

[from *Groundwater Newsletter*, May 16, 1993]

## **MEXICAN WATER**

Canadian scientists from the Groundwater Research Institute at the University of Waterloo and Mexican scientists from the Universidad Nacional Autonoma de Mexico have discovered an untouched aquifer beneath those that presently supply Mexico City. Continuous extraction of water from Mexico City's aquifers has caused the city to sink 8 metres over the last 30 years. Tapping into this deeper aquifer may help reduce that subsidence.

[from *Groundwater Newsletter*, Feb. 28, 1993]

## **PROFITS FROM RECYCLING**

Robertson Mohawk Fuel Distributors, the company that opened the first commercial methanol fuel station in Western Canada in 1992, now hauls away used oil when delivering oil to farmers and other bulk users. In its first year of operation, the Robertson service collected 1 million litres for re-refining at Mohawk's plant in Burnaby, B.C. There is room for growth since only 25% of the 125 million litres of lubricating oil used in Alberta gets recycled, 25% is consumed by combustion, and 50% is still being disposed of improperly. Currently at the break-even point, Robertson expects to be making a profit in two years.

[from *EnviroLine*, Vol. 4, No. 14, p. 4]

## **DOUBLE STANDARDS**

Syncrude Canada is considering making its synthetic oil cleaner-burning to make it more attractive to customers in the U.S.A. Syncrude's American customers can refine the crude for less if Syncrude tailors it more closely to their needs. Also, the cleaner the fuel burns, the more Syncrude can charge. The company is looking at two different products, one for the pollution-sensitive US and another for Canada.

[from *Edmonton Journal*, June 26, 1992]

## **GETTING TO THE BOTTOM OF IT**

The latest in waste-related occupations may be that of methane diver, a term coined by the environmental magazine, *Garbage*. Wayne Brusate and crew, from Commercial Diving & Marine Services (Port Huron, MI), made their first dive into an active landfill about seven years ago to unblock leachate collection pipes. The crew's four men and two women are probably the only divers in the country working in landfills.

[from *Garbage*, Oct.-Nov., 1992]

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