EXTRACTIONS

a newsletter from O'CONNOR ASSOCIATES

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NEW GUIDELINES FOR ONTARIO

The Ontario Ministry of Environment and Energy recently released *Proposed Guidelines for the Clean-up of Contaminated Sites in Ontario* for public review and comment. The proposed guidelines are intended to replace the existing guidelines from 1989.

These new guidelines provide greater flexibility by allowing site-specific risk assessments in cases where remediation to meet the generic criteria may be too expensive. Also, while the existing guidelines cover only 22 contaminants, the proposed guidelines list concentration targets for 117 contaminants. The Ministry will have the authority to require that a site be restored in a manner that is consistent with the proposed guidelines.

[from *Environmental Law Bulletin-Extra*, August 2, 1994]

LIVING UP TO ITS NAME

A contaminated site was a hot topic in the tiny village of Cando, Saskatchewan recently, but the problem was resolved without acrimony or legal wrangling.

Last December, 150 people attended a town hall meeting in Cando (population 97) to discuss who was responsible for cleanup of the local service station. The outlet and its facilities are owned by local residents, but the land is owned by the village.

The outcome of the meeting was an agreement to share the costs of remediation between the owners and the village, while the underground storage tanks (USTs) will be replaced entirely at the owners' expense.

As a result of the compromise, Barry Wiens, Saskatchewan environment and resource management minister, congratulated Cando and the service station owners for "demonstrating their commitment to protecting their local environment, without jeopardizing the financial viability of the local business and municipality."

[from *Octane*, Vol. 8, No. 1, Spring, 1994]

NEW DIESEL STANDARDS IN BC

The sale of only low sulphur diesel fuel will soon be mandatory throughout British Columbia in an effort to reduce emissions from heavy duty vehicles. The *Low Sulphur Diesel Fuel Regulation*, the first of its kind in Canada, bans the sale of high sulphur diesel fuel for on-road use after October 1, 1994. A short-term exemption will be granted to bulk buyers outside the Lower Fraser Valley until April 1, 1995.

A recent cost-benefit study indicated that reducing air pollution by actions such as using reformulated fuel could prevent 2 800 premature deaths and 33 000 hospital emergency room visits in Greater Vancouver and the Fraser Valley over the next 25 years.

[from a BC Government news release, July 15, 1994]

DANGEROUS WATER PUMPS?

The Environmental Defense Fund and the Natural Resources Defense Council filed lawsuits in California last April against four manufacturers of submersible water pumps having parts cast from lead-based brass. Tests done by the University of North Carolina (Asheville) environmental lab found high levels of lead could leach from pumps into groundwater being extracted from deep wells. The pumps tested in the North Carolina study were not certified by the National Sanitation Foundation.

The EPA urged well owners with recently-installed pumps to switch to bottled water while they had their well water tested for lead contamination. The Water Systems Council, which represents water-well products manufacturers, suppliers, and distributors, said, "The public has a right to information about the real exposure to lead, not that created in the theoretical environment [of a lab]."

[from *Groundwater Newsletter*, Vol. 23, No. 8, April 30, 1994]

MULTIPURPOSE WELL DESIGN SAVES COSTS

OAK Environmental Equipment Supply Ltd. of Calgary, with engineering assistance from Alan Yule of O'Connor Associates, has developed a multipurpose well casing system for environmental monitoring and remediation.

The well casing is available in 2", 4", and 6" pipe diameters and in various materials including PVC, carbon steel, stainless steel, and fibreglass-reinforced plastic. This innovative well design can be used for environmental monitoring of light, non-aqueous-phase liquids (LNAPLs) and dissolved contaminants as well as in situ remediation by means of groundwater pumping and treatment, in situ air injection ("sparging"), and simultaneous vapour extraction.

US COMBATS LUST

Leak-detection devices are now mandatory in the United States to provide early warning of a leaking underground storage tank (LUST). Tank owners who failed to meet the five-year phase-in period that ended on December 22, 1993 face fines of up to $10 000 per tank per day. The deadline for the last phased-in requirement for spill and overflow prevention and corrosion protection is December 1998. By then, all underground storage tanks (USTs) must meet all federal technical requirements or be properly decommissioned.

[from *Groundwater Newsletter*, Vol. 22, No. 24, December 31, 1993]

SOME BIG NUMBERS

About 25% of known leaking USTs in the midwestern US (Ohio, Indiana, Illinois, Michigan, Wisconsin, and Minnesota) have been mitigated since 1988. Almost half the clean-ups, or 5 400, were done in 1993. Over 450 000 gallons of petroleum products were recovered from the subsurface during 1993, and 6.3 billion gallons of contaminated groundwater and 8 million tons of contaminated soil were treated or removed from UST sites. But there are still 37 500 leaking USTs left to be dealt with.

[from *Groundwater Newsletter*, Vol. 23, No. 2, January 31, 1994]

RECYCLING FLUORESCENT TUBES

Although fluorescent tubes use one quarter the energy of an incandescent bulb and last nine times as long, they still have a negative effect on human health and the environment when dumped in a landfill. Fluorescent tubes are the second largest source of mercury pollution after alkaline batteries. Thomas H. Woo of the US Naval Surface Warfare Center recommends recycling fluorescent tubes to reduce the amount of mercury, lead, and cadmium released into the environment. He claims the cost of recycling mercury and other materials from intact tubes is worth the reduction in potential harm that the tube materials can have on human health and the environment.

[from *Environmental Update*, April 1994]

SUBSTITUTE FOR NITRATES

A University of Toronto food engineering group has developed a substitute for the nitrates used to cure meat. The substitute is a mixture of meat pigment, an antimicrobial agent, and an antioxidant to increase the meat's shelf life. While nitrates are relatively safe, the risk of stomach cancer does increase with the amount of processed meat consumed. If current field tests are satisfactory, U of T will seek approval from Canadian and US regulators to use the substitute in meat processing.

[from *Engineering Dimensions*, March/April 1994, p. 35]

EDITORIAL REJECTS GOVERNMENT COMPETITION

An outspoken editorial in the annual *Environmental Lab Supplement* published by Hazardous Materials Management argues that municipalities and industry should adopt a "Buy Private Sector" policy when purchasing analytical lab services. Such a policy, the editorial argues, would discourage governments from competing directly with private labs and encourage them to perform their proper roles: to set standards, develop methods and validate processes.

In an attempt to avoid downsizing, public sector labs now charge for services they formerly provided free, and they bid against private labs on many major contracts. Our taxes subsidize the services provided by these government labs. The editor asks why governments have chosen to compete with the analytical lab industry when they don't engage in equivalent competition in other industries such as computers, cars, clothing, or furniture.

He suggests that, instead, Canadian governments should follow the example of the EPA in the United States and use their resources to create much-needed analytical standards in Canada. The EPA, rather than compete with private labs, sets standards, establishes process controls, develops methods, and validates processes. The EPA also offers private labs an information hotline and guarantees a response within 24 hours.

[from *Hazardous Materials Management*, April 1994, p. 36]

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