

## **Chart 10**

# **Industrial wastewater management (IWWM) research and engineering infrastructure**

### **Science and technology — Canada's competing edge**

Canada's leading science and technology agency is the National Research Council (NRC). NRC contributes to Canadian companies' practical ideas, inventions, technical know-how, industrial research assistance, world class facilities and the largest collection of scientific and technological data in North America. With a staff of 3 000 located in 15 laboratories across Canada, NRC encourages various types of arrangements with Canadian companies for the use of these facilities and expertise.

Major research centres are located in British Columbia, Saskatchewan, Manitoba, Ontario, Quebec, Nova Scotia and Newfoundland.

The areas covered are diverse as biotechnology to robotics to space science.

Examples of specific research and engineering establishments across Canada are:

#### **British Columbia (Greater Vancouver)**

- University of British Columbia has a large IWWM graduate program
- Wastewater Technology Centre — an environmental research centre

#### **Alberta (Edmonton)**

- University of Alberta is the second largest university in Canada and has a large, well-established IWWM graduate program
- Vegreville Environmental Centre — a provincial research centre
- Alberta Research Council — oil and coal related technologies are a special area of expertise.
- Alberta Special Waste Management Corporation — responsible for the management of industrial wastes at its Swan Hills facility.

#### **Saskatchewan (Saskatoon)**

- Saskatchewan Research Council — uranium and potash related industries are a special focus of activity

#### **Manitoba (Winnipeg)**

- Freshwater Institute (federal) — water research on inland waters
- University of Manitoba — a graduate industrial waste management program

#### **Ontario**

- Fifteen universities are located here
- Six major universities with IWWM research programs
- University of Waterloo — world leader in computer technology
- Wastewater Technology Centre — world-class wastewater management R&D centre

- Ontario Waste Management Corporation — Ontario Crown Corporation with expertise in industrial and hazardous waste management
- Ortech — Ontario Crown Corporation active in IWWM research and waste exchange
- Canada Centre for Inland Waters — world-class water research centre
- National Research Council with 9 research facilities
- Federal government research centres in
  - physics
  - electronics
  - optics
  - communications
  - agriculture
  - mining/exploration
- Centre for Groundwater Research — University of Waterloo

#### **Quebec**

- Two major universities with IWWM research programs
- Biotechnology Research Institute (NRC), Montreal
- Two large centres active in IWWM research
- Pulp and Paper Research Institute of Canada — Montreal

#### **Atlantic**

- Centre for Cold Ocean Resources Engineering (St. John's, Newfoundland) — world-renowned research centre for the marine environment