

Introducing Technical & Environmental Services

FNESS' Technical & Environmental Services department (T&ES) was established when FNESS was given management responsibility for the *Fuel Storage Tank Removal/Replacement Program* (Fuel Tank Program) from Indian and Northern Affairs Canada in 1995.

Over the years, we have also provided general information, community liaison services, and educational workshops in the areas of:

- Solid Waste Management;
- Climate Change Awareness;
- Flood and Erosion Mitigation; and,
- Fuel Handling and Basic Fuel Spill Response Training.

We employ qualified staff, consultants and contractors to assist us. Community support is integral to the success of our projects; it is therefore a priority to hire local First Nations peoples to provide expertise, information and labour for our projects.

Drill Rig installing groundwater monitoring wells – Tsay Keh Dene First Nation.

Current Programs

T&ES is currently dedicating most of its resources to Fuel Tank Program initiatives. However, we are happy to provide general reference information or advice upon request to assist your community in its environmental and technical projects. We also encourage you to let us know what programs and services you would like to see our department develop and regularly offer.

Fuel Tank Program Overview

Since 1995, FNESS has managed the removal, replacement or upgrade of band-owned underground and aboveground fuel storage tanks in First Nations' communities in BC. This program is managed on behalf of Indian and Northern Affairs Canada (INAC). The objective of this program is to reduce the risk to human health and the environment by taking into account current environmental and engineering

standards and regulations for the installation, operation and maintenance of fuel storage tanks. At the same time, we aim to address any fuel contaminated soil or groundwater associated with fuel spills or fuel tanks.

All bands in BC who opted to participate in the program have undergone a Phase I Fuel Storage Tank Inventory to identify fuel tanks that require removal, replacement or upgrade services. Phase II and Phase III projects are still in progress.



Groundwater sampling – Tsay Keh Dene First Nation.



Underground storage tank removal – Wei Wai Kum First Nation.



Fuel pipe removal – Heiltsuk First Nation.



Product bail-down testing
– Tsay Keh Dene First Nation.



Soil profiling
– Nadleh Whut'en First Nation.

Fuel Tank Program Services

In the removal, replacement or upgrade of fuel storage tanks, we provide:

- Planning and detailed design by environmental, mechanical and civil engineers;
- Independent professional review and approval of detailed designs to ensure that they meet current codes of practice;
- Consultation with partnering First Nation to finalize the planning and design prior to implementation;
- Regulatory approvals, permits, land encumbrance checks and environmental assessments;
- Tank removal and construction by specialized, pre-qualified environmental and fuel facility installation contractors;
- Construction quality assurance and control inspections;
- Preparation of Operation & Maintenance Manuals and delivery of operator training;



Test pitting
– Nadleh Whut'en First Nation.

- Preparation of Emergency Response Guides and delivery of Emergency Spill Response Training for operators and members of the volunteer fire department;
- Final completion reports and as-built drawings;
- Clean-up of fuel contaminated soils and groundwater;
- Development of risk-based strategies for the management of sites with low-level residual fuel contamination; and,
- Project Management Services.

Student Co-op & Mentorship

Our department firmly believes in the value and benefit of mentoring First Nations students interested in the environmental sciences. Through our professional contacts, we may be able to help you find a summer placement or project in this field. Please contact our office to discuss your interests and possibilities.

by Robyn Weisner & Trudy O'Donaghey

T & E S T E A M



Robyn Weisner is the *Coordinator Technical and Environmental Services*. She joined FNESS in October 2000 to develop and deliver environmental education programs about recycling, composting and climate change at First Nations' schools. Robyn took over management of the department in 2007. Her work now involves leading all of the fuel storage upgrade/installation and fuel site remediation projects as well as managing the new national satellite initiative project. Robyn earned her Bachelor of Science degree from the University of British Columbia.



Trudy O'Donaghey is the *senior Environmental Specialist* and works cooperatively with Robyn to develop, manage and deliver our technical and environmental programs, and she stays current with the environmental issues, conditions, practices and concerns of First Nations in BC. Trudy is a member of the Seton Lake Band, St'at'imc Nation. Trudy received her M.Sc. in Environment and Resource Management from the Vrije Universiteit, Amsterdam, Netherlands in 2005 where she specialized in Indigenous Peoples and Globalization. Trudy started at FNESS as a summer student in 2002 and received a full-time posting with the T&ES department in 2005.



Brenda Maguire is an *Environmental Specialist* who started working with FNESS in 2001. She focused on assisting communities to find long-term solutions to their solid waste issues. After two years of work, she took a leave of absence to spend some time with her new baby girl. Brenda returned to FNESS in 2005 to work part time. Her main focus is to update information in a national database regarding fuel contaminated sites remediated through the Fuel Tank Program. Brenda has a diploma in Environmental Protection Technology from Kwantlen College, as well as a B.Sc. in Environmental Science (Biology stream) from Simon Fraser University.