

OIL & GAS INQUIRER

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Keeping readers responsibly informed

GREEN HANDS

HOW THE OILPATCH RECRUITS AND TRAINS A VERY DIFFERENT GENERATION OF YOUNG WORKERS

Great gas plants

These five natural gas processing facilities demonstrate decades of top-flight technology

Southern struggle

With shallow gas drilling in decline, service operators focus on new oil plays in southern Alberta

TOOLS OF THE TRADE

A LOOK AT NEW TECHNOLOGIES

Enviro Vault DuoVault



3-D renderings
of the DuoVault
tank-in-a-tank
design.

Who is Enviro Vault Canada Ltd.?

People, planet and profit, or the triple bottom line, has always been a cornerstone at Enviro Vault Canada Ltd. Our flagship product is the Enviro Vault, which is an internal chamber in a storage tank that prevents oil spills (or other fluid) and freezing. We are not a tank manufacturer — rather we work with them.

What is an Enviro Vault?

The Enviro Vault is a patented concept whereby a recessed chamber is installed inside the tank with an access door through the tank wall. All valves, sample taps, electronic controls and heater (if required) are mounted inside the Enviro Vault. Enviro Vaults can be fitted in any size or shape of new tank or in-service tank for any specific application — heavy oil, production tanks, produced water, rental tanks, instrumentation packages, separator packages and any other application where a tank is required.

What is the DuoVault?

The DuoVault is a tank-in-a-tank design that was developed by Enviro Vault to be a true secondary containment tank. Continuous uninterrupted interstitial space, 100 per cent secondary containment, spill containment, portability and protection from the elements for valves are its competitive advantages.

What is Energy Resources Conservation Board Directive 055?

In Alberta, the Energy Resources Conservation Board (ERCB) Directive 055 regulates the storage requirements for the upstream petroleum industry. In July 2009, the ERCB released the report, *Updates to Storage Requirements for the Upstream Petroleum Industry Discussion Document on Directive 055*. It indicated that "the majority of releases from tanks are the result of operational issues (e.g. overfilling, leaks and drips from valves and fittings, and spillage associated with inventory movement), not catastrophic tank failures or releases that would be contained by the second wall of a double-wall above-ground storage tank."

Also, the report says, "ERCB inspectors are finding numerous double-walled above-ground storage tanks configured with manways (the majority are single-walled) and piping through the walls of the tanks." Enviro Vault is of the opinion that because of these issues, it was noted in the discussion document that, "the ERCB will require all double-walled above-ground tanks installed after Jan. 1, 2010, to be surrounded by a dike, meeting the requirements specified in Section 5.3.2.3(a) of Directive 055." This change has yet to be implemented and is not enforced in Alberta to date.

According to the discussion document, "the use of a tank as secondary containment or a tank-in-a-tank assembly is not categorized as a double-walled above-ground tank, provided that the construction, secondary containment and leak detection requirements of Section 5.3 of Directive 055 are being satisfied," and that "the tank has been designed by a professional engineer practicing in Alberta."

The DuoVault design has been approved and stamped by an appropriately qualified engineer, which we believe enables oil and gas producers to comply with the ERCB directive and its adopted changes. It should be noted that Enviro Vault is not associated in any way with the ERCB and that the regulatory agency does not endorse specific products.

Information provided by
Mike Nielsen, General Manager, Enviro Vault Canada Ltd.