

Emergency Surface Water Pond Treatment Technology

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There are over 1,000 gas facilities throughout Alberta. These comprise both of sweet and sour processing plants; some which are regulated only by the Energy Resources Conservation Board (ERCB), and others which are jointly regulated by ERCB and Alberta Environment (AENV). Gas plant facilities are located in the Northern, Central and Southern regions of Alberta [Figure 1], having surface water runoff retention ponds ranging in size from 100 m³ to 5,000 m³ depending on regional rainfall statistics and the runoff capture area.

Under ERCB Directive 55 or a specific facility approval issued under the Environmental Protection and Enhancement Act (EPEA), facilities must construct a series of ditches that capture and direct runoff into a surface water retention pond. In this report, 'surface water runoff' is defined as the precipitation (rainfall or snowmelt) that accumulates on site and is directed into a retention pond (runoff pond). These ponds are then tested to ensure that the surface water is not contaminated prior to release into the environment.

Release requirements are specified in section 11 of Directive 55 or in the facilities EPEA approval.

Final Report

2009 Presentation: Project Review

2010 Presentation: Project Review [and Best Management Practices](#)