

Brownfields Development: 60-year old Construction Yard – Remediated and Redeveloped!

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In 2004 a remedial action plan (RAP) for this former construction maintenance yard was submitted to Alberta Environment for approval (Remtech 2004). In the next two years, soil and in-situ groundwater remediation activities were completed and the property was divested by Inland Construction Ltd. In 2006 the original property was subdivided into two parcels. The southern parcel was sold in 2006 and re-development began later that year after the old welding shop was demolished. In 2007 Courtenay Real Estate Services Inc. (CRESI) of Calgary commenced re-development of the northern parcel.

Following the completion of remedial activities, two areas of impacted soils remained at the site. Due to limited access these areas, (one located underneath the welding shop and the other beneath the former hydraulic hoist pillar), could not be remediated at the time.

In support of a development permit submitted by CRESI to the City of Calgary Development and Planning Department, Ecoterra Solutions Inc. prepared a Risk Management Plan, a set of tendering documents for buildings demolition, and a soil management plan for remediation of impacted soils in the vicinity of the former hoist bay.

In spring 2007 all utilities and services to the site were disconnected and the initial asbestos survey commenced. The asbestos survey identified several building materials containing asbestos concentrations greater than the Alberta OH & S Act. In summer 2007, all preliminary activities were completed and the site was secured for asbestos abatement. On August 30, 2007, following the site safety kick-off meeting, the site restoration commenced by removing and recycling concrete and asphalt. At the same time the asbestos abatement was initiated. Following the asbestos abatement, the buildings and the structures at the site were demolished, and the materials were collected, sorted, recycled, reused and disposed.

In fall 2007 the impacted soils located underneath the hoist bay pillar were excavated and disposed of at the landfill and confirmatory soil samples were collected and analysed to ensure removal of all impacted soils from the site. On November 22, 2007 the building demolition and the soil remediation activities were completed and the security fence was erected.

During summer 2008, CRESI received the development permit from the City of Calgary, and construction of the Southern Alberta Eye Clinic began on October 23, 2008. Because the shallow watertable elevation at the site is above the proposed foundation slab bottom, site dewatering was required to accommodate concrete foundation construction. Ecoterra obtained a water discharge permit from the City of Calgary and implemented discharge water quality monitoring. During site dewatering, collected groundwater was treated with active carbon filter and disposed to the City's sanitary sewage. Additionally, ambient air quality was monitored during the excavation with a portable gas detector to measure the concentrations of benzene and ensure that workers that entered the excavation were not exposed to benzene concentrations greater than those prescribed by the Alberta OH & S Act.

As of May 2009 the construction of the building frame is at the final stages.

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Mr. Agatonovic is a Senior Hydrogeologist with 28 years of international experience undertaking a variety of environmental projects. In the last 17 years Vladimir has conducted hundreds of environmental site and liability assessments, groundwater studies and in-situ remedial projects in Western Canada. Recently he has focused on a site environmental risk liability assessment and management; and large scale multi disciplinary project administrative and technical performance management tasks.

Currently, Vladimir is providing a senior technical advice role on a variety of environmental assessment and groundwater exploration projects in Alberta and British Columbia.