Professional Displays

On display in Exhibit Hall Monday & Tuesday

D-101 & D-102 ASCO Power Technologies Canada

D-103 Golder Associates Ltd.

Assessment of Chemical Exposure in Indoor Air from Vapour Intrusion

Gillian Daly, John Goodin, Theresa Repaso-Subang. *Golder Associates, 2390 Argentia Road, Mississauga ON L5N 5Z7*

Culminated groundwater can impact basements, buildings and other enclosed spaces by the migration of volatile chemicals through the subsurface. At an industrial site in Ontario, concentrations of chlorinated volatile organic compounds (VOCs) have been measured in indoor air, soil vapour and groundwater. Concentrations of many of the chlorinated VOCs in groundwater exceed the Ontario Ministry of the Environment non-potable groundwater criteria while indoor air concentrations and soil vapour concentrations are well below Health Canada's recommended ACGIH standards. The Johnson and Ettinger vapour intrusion model has been used to predict indoor air concentrations based on soil vapour concentrations. Soil vapour and indoor air concentrations can be used to evaluate exposure to chemicals that have migrated into buildings through vapour intrusion. This type of assessment can be completed for any building type, and can be used to evaluate chemical exposure in aging buildings and hospitals.

D-104 Parkin Architects Limited

Royal Ottawa Hospital

The new Royal Ottawa Mental Health Centre, completed in 2007 is Canada's first P3 hospital project and it provides tertiary care psychiatric services for outpatients and 200 inpatients. The new 400,000 sq. ft. building includes a three-storey in-patient and out-patient facility, and a seven-storey tower for the Hospital's Institute for Mental Health Research.

The Parkin/Adamson/BBB design team focused on creating a personal, comfortable and familiar setting for patients and visitors. Many residential-style elements were incorporated such a bay windows and courtyards. Principal rooms have access to natural light, and all patient areas are linked to allow for easy movement of healthcare personnel. A key design feature is the impressive inside central wintergarden. This three-storey skylit area houses retail facilities, amenities and public services for patients and visitors. The end result is a modern, nurturing and healing environment that is an integral part of the community it serves.

D-105 Parkin Architects Limited

William Osler Health Centre

The William Osler Health Centre is one of Ontario's first two P3 projects, initiated to support the healthcare needs of a rapidly growing population base in the Brampton region. The 1.3 million sq. ft. facility replaced the existing obsolete hospital as the primary acute care facility for the area, with 608 acute-care beds and 18 operating rooms. The Parkin/Adamson design includes a three-storey Diagnostics and Treatment Building, as well as a six-storey inpatient Building linked via two sets of corridors at each level. The facility has a total of 37 departments, ranging from surgery and diagnostic services to emergency and ambulatory care.

Extensive meetings with stakeholder user groups to assess needs and the impact of proposed design elements on patients, staff efficiency, working space and resources. Carefully considered details were developed for clinical functionality; diagnostic equipment needs; natural lighting requirements; noise levels and life cycle costs, among other factors impacting the healing environment.

D-106 & D-107 Spirax Sarco Canada Ltd.

Energy Efficient Hot Water Generation

Spirax has conducted testing for the Easiheat Hot Water Generator. Savings of 6.3% and 21% over traditional technologies. These tests were conducted by NGTC on behalf of Enbridge, Union Gas and Galmet.