

# Proactive Indoor Air Quality Management

he new headquarters of the Vancouver City Savings Credit Union (Vancity), located at Main Street and Terminal Avenue in Vancouver, has been designed to be a state of the art, energy efficient, and environmentally responsible building. In addition, the building materials and HVAC systems were carefully selected to provide comfortable temperature control and a high level of indoor air quality for the occupants.

To ensure the new building would operate to meet these objectives, Vancity was required to pay careful attention to the quality assurance of the building systems during the construction process, as well as the implementation of an ongoing Indoor Air Quality Management Program immediately following construction. Theodor D. Sterling and Associates Ltd. was commissioned to design and implement this program.

Theodor D. Sterling and Associates Ltd. tailored the program to meet the special requirements of the Vancity building. The implementation of a proactive management system designed to identify and correct conditions before they resulted in occupant discomfort and indoor air quality concerns was of particular importance. The program would also provide baseline measurements for future comparisons. The proactive Indoor Air Quality Management Program was incorporated as part of the building operations and maintenance schedule. This program consists of an initial review of the mechanical plans and architectural specifications, a pre-occupancy on-site test period and subsequent post-occupancy test periods semi-annually, on an ongoing basis. Each test period includes:

- Walkthrough Inspections:
- Baseline Air Quality Measurements: total volatile organic compounds, formaldehyde, carbon dioxide, carbon monoxide, dust levels, temperature, humidity, ozone, microbial
- Archival Documentation of Results: comparison with regulatory standards, recommended guidelines, and previous test periods

The program was implemented prior to building occupancy to ensure that offgassing of emissions from construction materials was completed before Vancity staff began working in the building. Since implementation, Theodor D. Sterling and Associates Ltd.'s proactive Indoor Air Quality Management Program has assisted Vancity Operations staff in improving upon the high level of comfort and indoor air quality provided by the new building.

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#### IS YOUR BUILDING A HEALTHY BUILDING?

By using a proactive approach to indoor air quality management, Theodor D. Sterling and Associates Ltd. can help prevent problems, find solutions and help make your building an energy-efficient healthy building.

#### THEODOR D. STERLING AND ASSOCIATES LTD

From planning to retrofitting, we provide the following consulting services:

- Indoor air quality
- Phase one site assessments
- Prepurchase building evaluations
- Workplace audits
- Mitigation strategies
- Mechanical systems/ventilation
- Asbestos evaluation and control
- ✓ Illumination
- Noise
- Site and soil quality

WE CAN HELP MAKE YOUR ENVIRONMENT A HEALTHY ONE WITH OUR PROACTIVE INDOOR AIR QUALITY MANAGEMENT PROGRAM

### ENVIRONMENTAL CONSULTING AND RESEARCH

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