

perform a site assessment to assess the potential for overexposure, and if there is determined to be a risk of overexposure, air monitoring must be performed to determine exposure levels for both protected and unprotected workers during tasks that create a risk of exposure. As indicated under the ECP information above, if the airborne levels exceed 50% of the Exposure Level (.1 f/ml) for unprotected workers, or 50% of the maximum use concentration, then an Exposure Control Plan must be developed.

Also a new regulation regarding demolition and hazardous materials (20.112) requires a building owner or employer to inspect the site to identify any asbestos, lead, etc. and ensure that the hazardous materials found are safely contained or removed.

Under section 20.3 (3), there is also a requirement for a principal contractor (or owner) to appoint a qualified co-ordinator for the purpose of ensuring the co-ordination of health and safety activities, and include informing employers and workers of the hazards created by the work.

For more information about how the new Regulations may affect your workplace, including development of compliance strategies, contact PHH Environmental to discuss what we can do to help your workplace effectively deal with the changes. ❖

## HEALTH & SAFETY CHALLENGES IN ARGENTINA

By Randy Scott, CRSP

At the end of World War 2 Argentina had one of the strongest economies in the world. In 1999 this country of thirty million people has a re-emerging economy after three decades of financial and political instability. As part of Northern Alberta Institute of Technology's International Program, I was asked to present two weeks of seminars on safety, due diligence and emergency response. These courses were given in response to a new federal law requiring all employers to provide workplace insurance (a private equivalent to our Workers Compensation) for all workers in the country. The new found desire to provide education and dialogue in a formerly unregulated environment was the focus for my seminars. Nequen Province and its capital Nequen sits



*The rolling plains of Patagonia.*

## BUILDING MATERIAL DIVERSION

By John Holland, P.Eng., C.Eng.

In line with the current trend towards recycling and reuse there has been a growing trend in many parts of the world towards building deconstruction. Deconstruction is a process that encourages the careful dismantling of a structure scheduled for demolition and re-uses its components in different structures. BC Environment, the Greater Vancouver Regional District and Capital Regional District have initiated several seminars over the last twelve months to encourage stakeholder involvement in this process. I have spoken on the environmental aspects of material diversion at two of the three seminars given.

The motivations and barriers to this process



*Minimize what's in this landfill.*

in the Southern half of the country bounded by the Pampas to the North, the Andes to the West and the roaming plains of Patagonia to the South. It has many parallels with Alberta, both geographically and economically, with an economy based on agriculture, oil and gas. Government officials attended my seminars from the Ministries of Transport and Agriculture, along with school, hospital officials and industry. The challenges of multinational companies having to blend with local customs and habits prompted a need for further discussion and collective planning.

The workplace and environmental processes were similar to Canada in the nineteen seventies. Many hospitals had no fire escapes. Most workplaces had no formal health and safety documentation. No environmental first response plans had been compiled. There was a limited amount of worker-employer dialogue on these issues. Through these seminars a process of employer/worker dialogue was established that should initiate multi-stakeholder regulations and further more site specific training that will carefully enhance our Canadian process. ❖

are many. There is a renewed interest in restoration type building components. A large network of used building material dealers has set up across North America encouraging pre-demolition sales. The systematic handling of hazardous materials is prioritized as the building dismantling has become more carefully planned. The deconstruction process normally costs the same as

conventional demolition but it takes longer and consumes more labour and less demolition equipment, thus bringing enhanced employment benefits.

The deconstruction process is actively encouraged on some projects in Canada. The Department of National Defense requires a 3R Plan as part of the tender package. Several other public sector owners

are following suit. However the vast majority of buildings are still demolished the conventional way.

In classic building demolition, however, the time that deconstruction consumes adds costs to a project where a development permit has been issued and every day lost is an interest cost and a delay in bringing the new building to market. Tax assessments are calculated on a higher scale when the structure is standing and can only be abated when the site is level. Landfill fees are generally as low for construction waste as for single source (i.e. household wood) waste.

Some currently proposed initiatives are listed below:

- Full cycle accounting – looking at the full cost of a recycled product versus a new one and applying tax credits to the recycled product.
- Enhancing the National Building Code to make recycled products easier to design in to a project. Educate building inspectors on these changes.
- Applying a lower permit fee to deconstruction vs demolition.
- Enforce hazardous material pre-deconstruction survey system.
- Enforce consistent disposal requirements on private landfills. Require bonds prior to demolition/deconstruction permits being issued.
- Fast track deconstruction permits. Allow deconstruction permit before demolition permit.
- Design buildings for ultimate deconstruction rather than demolition.
- Advertise portable products more widely using the World Wide Web providing free advice on construction to potential purchasers of deconstructed items.
- Modify municipal bylaws to allow on site sales. ❖