

FOR IMMEDIATE RELEASE

## RPC Continues to Grow Air Quality Capabilities

Fredericton, August 24, 2010 - RPC continues to invest in its air quality capabilities after recently expanding its breathing air lab and, now, with the addition of an air quality scientist. RPC has recently been awarded funding by The New Brunswick Innovation Foundation to help offset the costs of adding an air quality scientist to its air quality group. The scientist will work with Thelma Green, an air quality specialist with over 30 years of experience, and other colleagues to build on RPC's expertise in air quality testing.

Air quality is a dynamic field where new research is constantly leading to new testing and analysis and one where RPC already has an extensive analysis capability. For example, RPC is accredited by the Standards Council of Canada (SCC) for mold testing. "Mold is a widespread concern but is especially important in New Brunswick since we frequently experience spring flooding," says Green, who finds the spring season to be especially busy for mold work. Homes and buildings that have experienced flood damage are susceptible to mold growth. Dormant spores become active in the presence of heat and moisture and rapidly grow where there are food sources such as cellulose (paper) based products. RPC has developed test methods that have been approved by SCC for testing and identifying mold. When mold is detected, clean up is recommended followed by a retest to ensure that the clean up was successful. The stringent quality assurance procedures require challenging proficiency testing. RPC's technicians have been trained in mold identification and see mold problems not only from flooding but from plumbing leaks, inadequate ventilation of moist air, and weather-related water infiltration.

Breathing air is another specialty of RPC. Breathing air is utilized by firefighters, paint shops, divers and many other professionals. Tanks of air are filled from compressors that, by law, require testing from an accredited lab every six months. RPC has developed a methodology approved and audited by SCC for the testing of breathing air to analyze for contaminants and moisture content. A cylinder is sent out to the client who follows instructions to fill it from their compressor. The cylinder is returned to RPC's labs for analysis and, if it meets the required criteria, a certificate is issued for the compressor. RPC is also accredited to test medical air and tests air from hospitals throughout Atlantic Canada.

Some air quality issues have been long-time concerns. For example, asbestos is a family of naturally occurring silicate minerals exploited commercially for their desirable physical properties such as flame, electrical, heat and chemical resistance. The inhalation of asbestos fibers can irritate the lungs and cause serious illnesses, including lung cancer. Long term exposure to asbestos is more likely to cause health problems. While asbestos cannot be used in new construction in Canada, it remains in insulation, ceiling tiles, flooring and other building materials. During renovations or demolitions, asbestos containing materials can be disturbed and fibers become airborne and a risk for inhalation. RPC is SCC accredited for the testing and identification of asbestos and performs hundreds of analyses for building owners, contractors and consultants.



Other air quality issues are relatively new. For example, radon gas has been shown to be the second leading cause of lung cancer after smoking. Radon is an invisible and odorless radioactive gas which is emitted from decaying uranium in the earth's surface. The gas rises and dissipates unless it accumulates in an enclosed area such as a basement where radon gas can rise through the soil and seep through cracks,

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*Left:  
RPC Air Quality Technician, Karla McLellan, identifies asbestos fibers that could cause serious illnesses.*

holes, and drain pipes in the foundations of homes and buildings. Since your home is typically at a lower pressure than outdoors, it tends to attract the gas through openings. In areas with limited ventilation, concentrations can increase beyond allowable limits. RPC has already completed hundreds of radon gas tests throughout New Brunswick and offers three options for testing: a 48-hour test, a three-month test and a continuous monitoring test. The three-month test is the preferred option, however the 48-hour test can provide a quick indication of potential problems and is particularly convenient for real estate transactions. The tests are relatively inexpensive and involve an easy-to-use kit that is installed by the homeowner and returned to RPC's lab in Fredericton where the results are analyzed and reported.

The new Air Quality Scientist position will conduct breathing air research for RPC's clients contributing to the development of new methods and technology, and expanding the professional services offering of RPC. "We'll be looking for someone with a Masters or PhD in a relevant field like chemistry or industrial hygiene," says Eric Cook, Executive Director of RPC. Qualified candidates can submit their applications to [careers@rpc.ca](mailto:careers@rpc.ca).

#### **About RPC**

RPC is New Brunswick's provincial research organization (PRO), an independent contract research and development and technical services organization located in Fredericton, NB. RPC's complement of 100 scientists, engineers and technologists are supported by a 13,000 sq. meter facility housing world-class analytical chemistry and material-testing laboratories, comprehensive life science capabilities, an internationally recognized fish health lab, extensive prototype design, manufacturing and testing services, and a wide variety of pilot facilities for the development and improvement of industrial and environmental processes and products.

RPC is accredited by various organizations including the Standards Council of Canada (SCC) and is ISO 9001:2008 certified. Further information about RPC's services is available from [www.rpc.ca](http://www.rpc.ca).

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