

## PCBs in Pointe Claire

**PCBs** (polychlorinated biphenyls) can be used to create transformers, important parts in the generation and distribution of electrical energy. PCBs are man made chemicals that are resistant to acids, bases and heat, making them great candidates for insulating materials in transformers and capacitors. Insulators block the flow of electricity from one point to another, allowing such electrical parts to be manipulated easily and safely by people working around electrical power plants. PCBs can also be found in some plastics and these chemicals have been determined to be a health hazard in many countries, as they have been shown to cause cancer and other health issues in several animal studies.



Electrical Power Plant

Last year, PCBs were found at Reliance Power Equipment Ltd. In Pointe Claire, their discovery caused a huge media frenzy as many were concerned for the environment and health of the people of Pointe Claire. According to CBC News, “PCBs had been detected in storm water runoff from the site, where leaking transformers and containers were discovered and removed last year.” (CBC News, August 27, 2014) Consequently, a notice was sent out to all residents of Pointe Claire, and access to water from these storm drains was cut off until further research and tests were conducted. Recently, the residents of Pointe Claire were notified that their water was in fact safe from any significant PCB contamination.

**Your task will be to analyze this human disturbance on the ecosystem and community of Pointe Claire and form an evidence based article on the issue.**

**Global Context:** Scientific and technological innovation

**Statement of Inquiry:** Scientists use evidence to develop technologies and explore the consequences of those technologies on the relationship between humans and their environment.

**Factual Question:** Which technology is used to facilitate the transfer of electrical energy?

**Conceptual Question:** Who should have the power to control the development and use of technologies?

**Debatable Question:** What are the limits of scientific understanding?

**Approaches to Learning:**

- Thinking skills
- Communication skills
- Research skills

**Members of the Group:**

1) \_\_\_\_\_

2) \_\_\_\_\_

**Role:** You are scientists from Environment Canada who specialize in polychlorinated biphenyls (PCBs).

**Audience:** The citizens of Pointe Claire, Quebec.

**Format:** You are to write a newspaper article for the West Island Suburban.

**Topic:** Explain what the problem is and what the City is doing about it in order to convince the citizens that they are safe.