3.5 Toxic chemicals and health risks from radiation

It is shameful that Canada ranked nearly last amongst Organization for Economic Cooperation and Development (OECD) countries in our generation of pollution and nuclear and hazardous wastes. (The 30 OECD member countries represent approximately 60% of the world's economy, 70% of world trade, and 20% of the world's population.)

Canada also lagged behind in the effectiveness of regulations covering toxic and chemical waste.

The Canadian Environmental Protection Act (CEPA) is now in its legislated five-year review. Industry groups are lobbying the government to water down the term "toxic" in the Act. They are concerned about the "stigma" associated with the term when it is applied to materials they produce. However, "toxic" accurately describes substances that are potentially harmful to human health and the environment, and weakening the term sends a signal to the public and to government that taking action to protect Canadians' health and the environment is not urgent. It is therefore essential that the legal framework of "toxic" substances not be eroded. The definitions within the act must remain unchanged, although the subject heading could be expanded to "Toxic and other harmful substances."

Greens remain concerned that Canada's key legislation to protect human health and the environment from threats posed by human-generated substances does not include pesticides or radionuclides. Now is the time to remedy this gap and amend CEPA to

cover the non-commercial aspects of pesticides, thus allowing the Pest Control Products Act to continue to regulate the registration and use of pesticide products, but allowing banning of dangerous substances and handling of disposal and spills to move into CEPA.

The historic tradition of secrecy surrounding the nuclear industry has kept emissions from nuclear power plants off CEPA's list. Levels of tritium in Ontario's water are high enough to be of concern, but they fall into a regulatory lacuna. Similarly, other harmful substances found in consumer products are not regulated by CEPA. While other laws such as the Hazardous Products Act (HPA) and the Food and Drugs Act (FDA) can sometimes be used to regulate such products, these laws are inadequate in addressing the human health and environmental risks. For example, the HPA bans lead in children's jewelry, but allows this proven toxic in a wide range of other products. The HPA and FDA also do not deal with substances that pose a threat to humans via their persistence in our environment, such as perfluorinated compounds and other substances that are persistent and bioaccumulative.

Despite having its objective of maintaining an 'ecosystem-based approach,' CEPA fails to provide specific protection for Canada's most significant and vulnerable ecosystems, in particular the Great Lakes-St. Lawrence basin, Georgia and Juan de Fuca Straits, and the Arctic. The Great Lakes-St. Lawrence basin is the world's largest freshwater ecosystem. It supports one third of Canada's population and generates one half of our economic activity. Nearly one half of Canada's air pollution is also generated within this region. Now the federal government is so lacking in precautionary judgment that it has approved shipping radioactive used parts of nuclear reactors through these waters for shipment to Europe. Juan de Fuca Strait on the west coast is home to an endangered population of killer whales whose bodies are so contaminated from bioaccumulation of toxins that they have to be classified as hazardous waste. Some of the pollutants generated in southern Canada end up in the high Arctic (through airborne contamination – see Section 3.1 Air Quality), causing irreparable harm to wildlife and poisoning the food system that many Inuit rely upon.

The Greens believe the onus should be on industry to show that the products they produce are safe, contrary to the current onus on government to demonstrate harm from these products. An industry onus is a key feature of the emerging REACH (Registration, Evaluation, and Authorization of Chemicals) system for regulating chemicals in the European Union (EU) that came into force on June 1, 2007. Europe is the largest chemicals market in the world. We believe that Canada must follow their lead. It is essential that the legal framework of 'toxic' substances not be eroded in CEPA, but rather, be expanded. We believe CEPA must be amended to cover the non-commercial uses of pesticides, thus allowing the Pest Control Products Act to continue to regulate the registration and use of pesticide products, while banning of dangerous pesticide substances and handling of disposal and spills are dealt with by CEPA. We believe CEPA should be extended to control toxic radionuclides, pesticides, and many other substances shown to be of significant risk to health.

Green Party MPs will:

- Amend the CEPA to:
    - Cover non-commercial handling and disposal of pesticides and radionuclides;
    - Cover regulation of all substances shown to be a significant risk to human health, including those causing cancer, immuno-suppression, endocrine disruption, neuro-toxicity, birth defects, and/or genetic mutations;
    - Register and restrict the use of the toxic chemicals mentioned above, with the goal of first eliminating the exposure of vulnerable groups within society (pregnant women, the unborn, children, the sick, the poor, the elderly, and Aboriginals) to them and ultimately eliminating their use altogether;
    - Require a precautionary principle approach towards chemical management: instead of determining the safety or harm of a product after

it is already in the marketplace, companies that make a chemical will be responsible for proving the safety of it before it can be used, as is done with pharmaceuticals;

- Add pollution prevention to the CEPA mandate.

- Establish a significant Toxic Chemical Tax (TCT) on harmful chemicals to make industry accountable for chemicals it produces and to prod industry to reduce and eliminate the production of toxic substances registered under the CEPA;
- End the production and use of the most dangerous toxic chemicals in Canada by 2020;
- End the use of pesticides for cosmetic purposes in Canada by 2016;
- Establish a CEPA taskforce to focus on pollution reduction in the Great Lakes – Saint Lawrence Basin and the Juan de Fuca-Georgia Strait region;
- Create a large Clean Canada Fund to clean up toxic sites;
- Ban the importation of toxic waste and their incineration;
- Clean up all toxic waste sites by 2030, with a priority placed on those communities most at risk;
- Advocate for a ban of the use of nanomaterials in all food products and for mandatory clear labelling when these nanomaterials are used in all other products;
- Support government research into the possible harmful effects non-naturally occurring nanomaterials may have on health and the environment;
- Limit human exposure to extremely low frequency (ELF) magnetic fields and to radio frequency radiation (RFR) to meet or exceed German 2009 standards.