

Problems with tritium exit signs and the need for a ban

- There are specific **health and environmental hazards** associated with the widespread global distribution of tritium-filled “glow-in-the-dark” devices such as exit signs, manufactured by SRB.
- The contents of a single exit sign, if converted to the oxide form and inhaled, would represent a **lethal dose of radiation**.
- A 1993 U.K. study found that the radiation hazard of older exit signs increases greatly as tritium is converted to the oxide form. Breakage of tubes in these signs can expose humans (and animals) to **high radiation doses**.
- Several recent incidents of exit sign breakage in the U.S. have forced the evacuation of homes and hospitals and expensive decontamination operations.
- If waste tubes are discarded, dumped and broken in landfills, tritium can leach out and **contaminate the groundwater**.
- A 2000 Scottish study found high levels of tritium in leachate from 11 landfills that could be traced to discarded exit signs, mostly manufactured by SRB, even though regulations were supposedly in place to prevent this from happening.
- Canada, unlike the U.S. and the U.K., allows tritium lights to be discarded in ordinary landfills. Other countries require that they be placed in radioactive waste disposal facilities or returned to the manufacturer.
- SRB in Pembroke is the only manufacturer in the world that accepts the return of waste tritium lights, **increasing the hazards to the local population**.
- Several jurisdictions have banned the use of tritium exit signs.
- Natural Resources Canada recommends against the use of tritium exit signs since they are not bright enough for the intended purpose and better alternatives (such as LEDs) exist.
- Canada is allowing SRB Technologies to pollute the Pembroke environment in order to market a radioactive waste material (tritium) which is routinely created as an unwanted hazardous by-product in CANDU reactors.
- These hazardous products are spreading tritium pollution around the world.
- A responsible action for the Canadian government would be to ban the civilian use (and manufacture for civilian use) of tritium exit signs, as well as the marketing of radioactive waste materials such as tritium.

This fact sheet was prepared by the Canadian Coalition for Nuclear Responsibility (www.ccnr.org) and Concerned Citizens of Renfrew County, November 2006