**Published in the Washington Post, November 28, 2007.** The letter responds to an article extolling the virtues of the hotter water in Lake Anna, VA, the water source for the two North Anna reactors.

## To The Editor:

Contrary to the claim by Scott Burnell of the Nuclear Regulatory Commission in "Happy in Their Haven Beside the Nuclear Plant" that Lake Anna water never comes in contact with the North Anna nuclear reactor, it's actually the other way round. The two unit reactor site routinely discharges into Lake Anna not only tremendous amounts of heat - since the reactors are only 33% thermally efficient 67% of the fission-generated heat is dumped - but also radioactivity. According to NRC records since 2000 alone, the reactor deliberately released more than 5700 curies of radioactive water (tritium with a radioactive half-life of 12.3 years) into the lake.

It is increasingly uncertain what constitutes a "permissible" radiation exposure. NRC's "protective" standard for radioactive tritium in drinking water is 1,000,000 picoCuries/liter. While the EPA standard is 20,000 pCi/l, the states of Colorado and California have set theirs at 400 pCi/l. Granted people don't drink out of the lake, but federal economic consideration of cost to industry to allow for such dumping has outweighed just how easily this radioactive form of hydrogen can be absorbed, inhaled and ingested.

Tritium exposure is proven to cause cancer and birth defects. Tritium crosses the placenta barrier to the fetus. There is no clinical safe dose.Currently eleven reactors discharge into the Chesapeake Bay watershed. Water consumption and thermal pollution by thermoelectric plants (fossil and nuclear) are increasingly contentious. Radioactive contamination of ground and surface waters from accidental leaks and routine permitted discharges are also under increasing scrutiny for the sake of public health and safety.