

From: "Barbara Youngberg" <bayoungb@gw.dec.state.ny.us>
To: <jdn@nrc.gov>
Date: 2/16/06 7:51AM
Subject: Cintichem Consent Order

Jim - Glad all the faxes were received.

Now that I've re-read the Order, I remember how carefully we had to tip-toe around NRC's authority. Basically, we were able to cite Cintichem for violating their SPDES permit because the permit contained a specific prohibition on discharge of radioactive materials, and they released I-131 through their permitted outfall. I noticed that the Order points out that the I-131 came from a leak in their hot cell ventilation system, which was, arguably, under the State license. We also cited them for causing an exceedance of groundwater quality standards, and for failing to keep exposures to radiation ALARA.

The regulations we cited in 1990 have all been amended since then, but I've attached a brief summary of the regulations in effect now that might apply if radioactive materials were leaking into groundwater from a State-licensed facility. (I put it in a WP file so the formatting wouldn't be lost.)

I'm in all day today. Feel free to call if you have any questions. (518-402-8572)

Here's the link to our regulations:

<http://www.dec.state.ny.us/website/regs/index.html>

Barb

CC: "Timothy Rice" <tbrice@gw.dec.state.ny.us>

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1. A leak may be considered a violation of 6 NYCRR Section 380- 3.1, "Permit Requirements," which says,

Except as otherwise specifically provided in this Part, any person who discharges licensed material into the air or water or disposes of radioactive material subject to this Part to the environment must obtain a permit issued pursuant to this Part. Such permits apply to the radioactive material contained in the discharge or the material to be disposed of.

"Water" includes groundwater, so the leak could be considered a discharge without a permit.

On the other hand, Part 380 defines "discharge" as "the controlled release of licensed material in effluents to the air, water, or sanitary sewer from radiation installations," and there might be a question of whether or not the leak is considered controlled. Alternatively, "disposal" is not defined in Part 380, so the leak might be considered disposal to the environment without a permit.

2. Another potential violation would be of Section 380-4.1 (a), "General Disposal Requirements", (which are similar to 10 CFR 20.2001):

- (a) No person shall dispose of radioactive material subject to this Part, except by:
- (1) Transfer to an authorized recipient pursuant to 10 NYCRR Part 16, 12 NYCRR Part 38, Article 175 of the New York City Health Code, or 10 CFR Part 20 [see section 380-1.6 of this Part]; or
 - (2) Decay in storage, where the storage is authorized by and in conformance with relevant requirements of state and federal law; or
 - (3) Disposal or discharge to the environment in accordance with this Part; or
 - (4) Disposal at a land disposal facility permitted pursuant to Part 383 of this Title, licensed by an agreement state or the U.S. Nuclear Regulatory Commission, or operated by the U.S. Department of Energy.

A leak would not fall under any of those four categories. The key difference between the Part 380 version and Part 20 is in number 3. The parallel provision in Part 20 reads, "by release in effluents within the limits in section 20.1301 [the dose limits]". But Part 380 says "in compliance with this Part" which includes the dose limits, but also includes the requirement to obtain a permit. Therefore, even if the dose limits aren't being exceeded, section 380-4.1(a) is still violated if there's no permit.

3. We also have our water quality regulations. Under 6 NYCRR section 701.1, "General Conditions Applying to All Water Classifications",

The discharge of sewage, industrial waste or other wastes shall not cause impairment of the best usages of the receiving water as specified by the water classifications at the location of discharge and at other locations that may be affected by such discharge.

The best usage of all fresh groundwaters in the state is defined in section 701.15, "Class GA Fresh Groundwaters," as follows:

The best usage of Class GA waters is as a source of potable water supply. Class GA waters are fresh groundwaters.

So, the leak of radioactive materials in concentrations exceeding the drinking water standards would impair the best usage of the groundwater. It doesn't matter that no one is currently drinking the water.

EXCERPTED BY
7-0-01