

Braidwood Groundwater Contamination

The licensee has suspended liquid radwaste discharges since the groundwater contamination was identified on November 30, 2005. Liquid radwaste is being stored onsite in temporary storage tanks. Radwaste discharges will not resume until the blowdown line integrity is verified. A licensee meeting with nearby residents took place on December 12, 2005, which Region III staff and State officials attended. Tentative, future licensee meetings with the residents are planned for later in January 2006. A January 26 meeting date has been planned by the licensee.

Current sample results onsite have identified levels of tritium as high as 250,000 picocuries per liter in a deep well (25'). Offsite levels have been identified as high as about 59,000 picocuries per liter (non-drinking water well) and at about 1400 - 1600 picocuries per liter in one residential drinking water well. NRC split-sample analyses are ongoing, as are NRC inspection activities to assess the licensee's recovery efforts and plume characterization. Initial sample results (including independent NRC samples of residential wells) have detected levels of tritium consistent with the licensee's results. As part of that inspection, members of the Region III staff observed the licensee's non-destructive evaluation of sections of the blowdown line. The results of that testing are under evaluation. A sample from the vacuum breaker 4 area, which is located north of Smiley Road, showed 900 picocuries per liter. The licensee indicated that an additional 26-28 residential wells will be sampled. These wells are located north and south of the discharge line that runs to the Kankakee river. RIII has arranged with Braidwood to obtain a portion of each sample for analysis.

→ On December 16, 2005, the State of Illinois Environmental Protection Agency issued the licensee a Violation Notice for contaminating the groundwater. On December 20, 2005, members of the Region III staff participated in a meeting between and Illinois Environmental Protection Agency and the licensee in Springfield, Illinois, which the licensee discussed the apparent origin of the contamination, its monitoring program and initial characterization, and the its future plans. Following that meeting, the Region, NRR, EDO, and OGC staffs conducted an internal meeting to discuss regulatory authority and preemption. A subsequent NRC internal meeting is scheduled for January 18, 2006, to further discuss the Illinois violations and regulatory jurisdiction issues.

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