Braidwood Groundwater Contamination - The licensee has suspended radioactive liquid discharges since the groundwater contamination was identified on November 30, 2005. As of January 6, 2006, the licensee has measured tritium as high as about 250,000 picoCuries per liter in onsite and offsite monitoring wells and has measured 1,524 picoCuries per liter of tritium in one offsite residential drinking water well. Liquid radwaste is being stored onsite in temporary storage tanks. Radioactive liquid 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. NRC split-sample analyses are ongoing, as are NRC inspection activities to assess the licensee's recovery efforts and plume characterization. On December 16, 2005, the State of Illinois issued a violation notice to the licensee based on tritium activity in both onsite and offsite groundwater wells. On December 20, 2005, members of the Region III staff participated in a meeting between the 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 its future plans The licensee also plans to have an additional meeting with nearby residents on January 26, 2006, which Region III and State officials plan to attend. The sample at vacuum breaker 4 had 900 picocuries per liter. The licensee has expanded sampling at private wells along the blow down line. On January 16, 2006, a resident noticed water pooling up around Vacuum Breaker 7, located off the owner controlled property, and informed the licensee. The licensee reduced blowdown flow and the leak stopped. Initial samples found no activity above background. and confirmatory samples were taken. The licensee is still investigating the failure mechanism. Region III and headquarters staffs (OGC, NRB, OEDO, STP) evaluated regulatory jurisdictional issues at an internal NRC meeting on January 18, 2006¹

The group discussed the inspection process and time line and determined that it is appropriate for the current situation. The group discussed conditions that would justify a change of direction. Region III is ready to implement the changes if conditions change.

Information in this record was deleted in accordance with the Freedom of Information Act, exemptions 5

613