

PROPOSED TRI-PARTY AGREEMENT MILESTONE M-24-33, CURRENT YEAR 1994
New Groundwater Monitoring Well
Justification for the 216-U-12 Crib

The 216-U-12 Crib has been in assessment groundwater monitoring for hazardous contaminants under RCRA assessment monitoring requirements, 40 CFR 265.93 (d), since the first quarter of CY 93. As summarized in the RCRA Annual Report, DOE/RL-93-88, Section 4.3, groundwater contamination detected in two downgradient wells is being assessed to determine the contributing chemical constituents and source. This phase of assessment is outlined in the Interim Status Groundwater Quality Assessment Plan for the 216-U-12 Crib, WHC-SD-EN-AP-108, rev. 0, released January 28, 1993.

The second phase of the assessment will deal with the delineation and location of the contaminant plume(s) and includes the drilling of additional boreholes for groundwater monitoring. Based on data collected to date it can be shown that the contamination is a result of high concentrations of nitrates and associated radioisotopes (Tech-99) released to the groundwater from disposal practices at the 216-U-12 Crib. This interpretation and the supporting evaluation will be released in the forthcoming groundwater assessment report due to Ecology on July 1, 1994. The recommendation of this evaluation is to move into phase II and proceed with delineating and defining the plume(s) through the drilling of investigative boreholes.

Limited subsurface data in the area downgradient of the U-12 Crib requires additional drilling to define the extent of the plume (see location map). One groundwater monitoring well is proposed to begin this investigation. The discovery process will determine the need and location of additional boreholes if required.

This borehole will be located based on strategies and modeling developed both in RCRA and from the 200-UP-2 Operable Unit Project (CERCLA) which is providing regional plume mapping and remedial investigations of the U-Plant waste disposal activities in the area. Another beneficiary of this well will be the Double Shell Tank project which is being constructed in this general area downgradient of the contaminants sourced by the U-12 Crib (and presumably the U-8 Crib). This well will be the only groundwater monitoring well available and capable of determining the nature and extent of contaminants in the groundwater upgradient from and near to the new tank farm.

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