



Tennessee Valley Authority, Post Office Box 2000, Spring City, Tennessee 37381-2000

August 27, 2001

Environmental Assistance Center
Tennessee Department of Environment and Conservation
Division of Underground Storage Tanks
540 McCallie Avenue, Suite 550
Chattanooga, Tennessee 37402

Attention: Karen Ridolfo

**WATTS BAR NUCLEAR PLANT (WBN) - FACILITY ID NO. 0-610035
REQUEST FOR EXTENSION/RECONSIDERATION OF REQUIREMENT TO
ADD MORE MONITORING WELLS**

WBN requests to continue the Monitoring Only Program at the subject site with an increased frequency in monitoring. If the intent of your July 25, 2001 letter is to further define the extent of contamination, WBN submits that the area is adequately defined. The small amount of diesel free product observed at well MW-2 has diminished with routine monitoring and manual bailing, suggesting that the product is likely residual in nature. As indicated in the Initial Site Characterization Report, the release site is hydrogeologically isolated and the likelihood of offsite contaminant migration via groundwater is negligible. Ultimately, the migration of residual free product is likely to be toward the groundwater sump which is routinely monitored. The area in which this release occurred also contains conduits and appurtenances that are essential to the safe operation of the plant. Clearly, this area should not be disturbed without very good cause.

WBN requests that you reconsider the specifics for this incident. Please review the attached Diesel Fuel Oil Update Report which summarizes the investigation and recent data collected at the site. Please factor in the significant risk to the safe operation of the plant that additional wells and soil borings represent and compare that risk to the potential gains of better defining the extent of contamination for what appears to be detection of residual free product from a small release in a hydrogeologically isolated area.

If this request is denied, please allow WBN at least 90 days upon receipt of your reply to identify well locations and implement additional investigation and corrective actions in accordance with rule 1200-1-15-.06. Additional time is needed to establish

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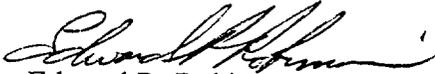
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contracts, make security arrangements for contractors, and most importantly to very carefully identify and install borings/wells in this highly sensitive and access restricted area. During the interim, WBN continues to monitor site wells and critical locations at a greater frequency, and to adhere to the requirements in the Monitoring Only Program.

Thank you for your consideration in this matter. If you should have any questions or need additional information, please contact Lanny Brown at (423) 365-8098, Hank Julian at (865) 632-1834, or me at (423) 365-1846 at Watts Bar.

Sincerely,



Edward R. Robinson

Radwaste/Environmental Superintendent

Enclosures

cc: Tennessee Department of Environment and Conservation
Division of Underground Storage Tanks
Fourth Floor, L & C Tower
401 Church Street
Nashville, Tennessee 37243-1541

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

Watts Bar Nuclear Plant (WBN)
Diesel Fuel Oil Update Report
Facility ID No. 0-610035

On May 10, 2001, routine monitoring was conducted at four site wells associated with the WBN diesel fuel oil release (Facility ID No. 0-610035). Approximately 1.9 ft of fuel oil free-product was observed at downgradient well MW-2 using an oil/water interface meter. This was the first observation of free-product at the site. After obtaining oil/water measurements, 1.25 L of product was removed from the well using a disposable teflon bailer and placed in a labeled 50-gallon drum being maintained at the site. The TDEC Division of Underground Storage Tanks was immediately contacted to report the observation and a formal letter of notification was transmitted to the Division. The Site Status Monitoring Report for Watts Bar Nuclear Plant (WBN) also documented the observation in accordance with Technical Guidance Document (TGD)-007, Section III. Since 5/30/01, monitoring and product removal has been conducted at a frequency of 3 to 7 days.

The attached figure shows groundwater elevations and product levels since the first observation of product at the site (period from 5/10 to 7/27/01). The upper plot depicts groundwater elevations for the measurement period. The adjusted MW-2 elevation data is also shown and is derived from the specific gravity of diesel fuel oil (0.85) and product thickness. As shown in the upper plot, groundwater elevations are correlated at site wells. From 5/10/01 to present, groundwater elevations in site wells have varied from about 0.1 to 0.4 ft. These data indicate that groundwater levels at the site are very stable. Since 5/10/01, the groundwater sump has also maintained consistent levels and an average elevation of 701.5 ft-msl. With the exception of well MW-2, there has been no evidence (i.e. odor or sheen) of diesel fuel oil in other site wells or the groundwater sump.

The lower plot shows the decreasing product thickness at well MW-2 since product measurements and removal began on 5/10/01. The product thickness at MW-2 has decreased from 1.9 ft on 5/10/01 to an average thickness of 0.17 ft since 7/2/01. Currently, manual bailing of product following measurements at well MW-2 averages about 100 mL of product.

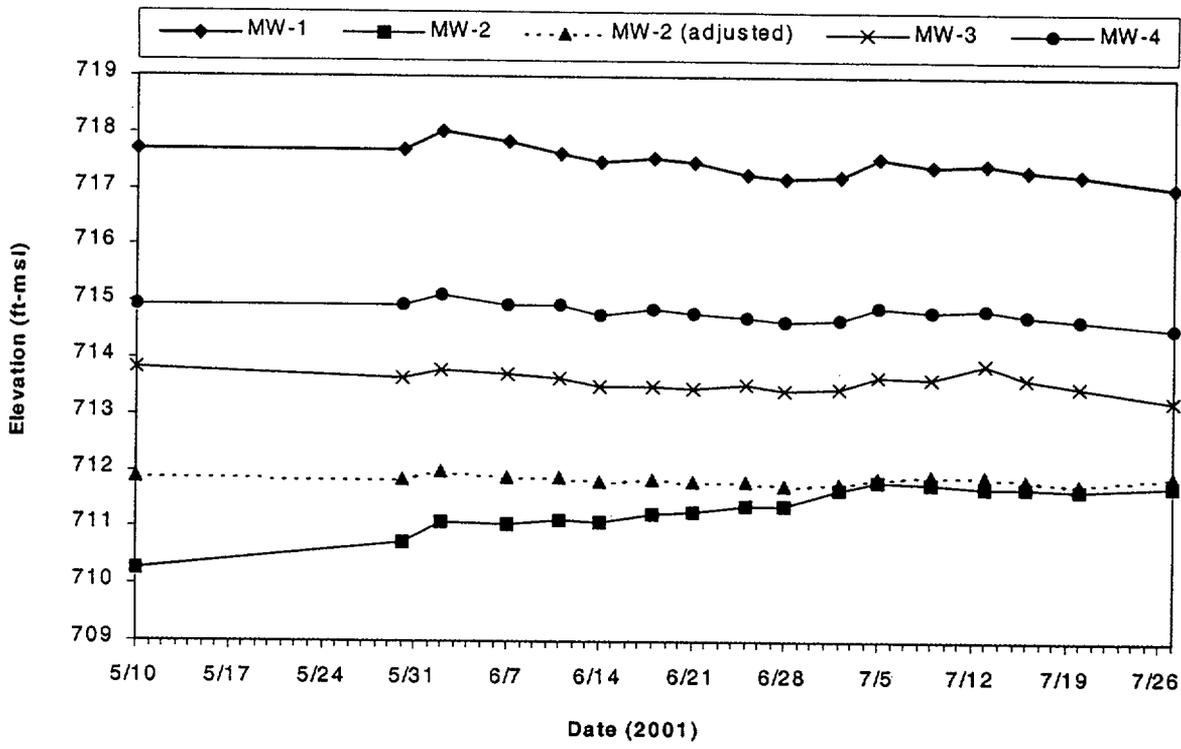
The subsurface geology at WBN is very well characterized with investigations that include 56 exploratory borings installed at the site from 1950 to 1970. Based on boring logs and measurements associated with the diesel fuel oil release, groundwater levels and the fuel oil product horizon occurs within alluvial terrace deposits (pebbles to cobbles in a sandy clay matrix) underlying the site. This zone is about 7-ft thick and is underlain by approximately 3 ft of saprolite. The low permeability Conasauga Formation comprises bedrock at the site and is composed of several hundred feet of interbedded shale and limestone. Therefore, the potential for vertical migration of contaminants associated with diesel fuel oil is highly unlikely.

Diesel fuel contamination of site groundwater, measured as extractable petroleum hydrocarbons (EPH), has been observed only slightly above the clean-up level (1.9 mg/L)

at well MW-2 during a single sampling event. A water use survey shows that there are no water supplies within ½-mile of the site. Additionally, the impacted aquifer is classified as a non-drinking water supply.

Based on groundwater level measurements at the site, the site groundwater sump appears to be the primary control for groundwater movement and is likely responsible for dewatering a large area surrounding its location. Potentiometric maps based on site groundwater level measurements indicate that groundwater movement from the diesel release area is toward the sump. The groundwater sump discharges to the storm drain system which ultimately discharges to the Yard Holding Pond. Although surface waters in the Yard Holding Pond initially exhibited a visible sheen of diesel fuel oil, the leaking section of fuel oil transfer line has been identified as the release source and has been replaced. Therefore, we anticipate that the minor amount of fuel oil product observed at the pond will continue to diminish. A floating boom at the Yard Holding Pond continues to be used for containment of the sheen of diesel fuel oil where the storm drain system discharges into the pond. The area is continually monitored to verify that the boom is containing the release and to exchange absorbent pads. The groundwater sump continues to control groundwater movement at the site and is likely to be recipient to any residual fuel oil product remaining in subsurface soils.

Groundwater Elevations at Site Wells



MW-2 Groundwater Elevations and Product Thickness

