



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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July 17, 2000

Mr. Michael Thompson
U.S. Department of Energy
P.O. Box 550, MSIN: K7-50
Richland, Washington 99352

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EDMC

Dear Mr. Thompson:

Re: Resource Conservation and Recovery Act (RCRA) Groundwater Monitoring Well Maintenance

The Washington State Department of Ecology (Ecology) observed RCRA groundwater monitoring well sampling activities at the S-SX Tank Farm on June 21, 2000. In particular, groundwater monitoring well sampling activities at wells 299-W23-14 (upgradient), 299-W23-13 (upgradient), and 299-W23-15 (downgradient) were observed. From linear regression calculations, it is Ecology's understanding that wells 299-W23-13 and 299-W23-14 will be unsampleable by the end of Fiscal Year (FY) 2000. The scheduled replacement (anticipated to occur prior to December 31, 2000) of the two upgradient wells (Tri-Party Agreement Milestone M-24-00L) is required to allow differentiation between upgradient and downgradient groundwater contamination.

As you are aware, 40 Code of Federal Regulations (CFR) 265.92 (as referenced by Washington Administrative Code [WAC] 173-303-400) requires background to be statistically established by quarterly sampling over a one-year period. It is Ecology's position that statistical comparisons (between upgradient and downgradient wells) of tank waste constituents is an appropriate function during assessment monitoring. In acknowledgement of the time required to establish statistical background for tank waste constituents (i.e., nitrate, chromium, technetium-99, tritium, etc.) in the new upgradient wells at the S-SX Tank Farm, Ecology recognizes the value of extending the use of the two existing upgradient wells for statistical evaluation purposes. Ideally, the two existing upgradient wells could be sampled through 2001, during the period that tank waste constituent data is being collected at the new wells.

On June 21, 2000, well 299-W23-14 was not sampled because water levels in the area had declined to below the pump intake. It is Ecology's understanding that a request has been made to lower the intake to enable sampling. In addition, during the June 21, 2000, sampling event, well 299-W23-13 yielded turbid samples. The recharge rate of well 299-W23-13 appeared to be adequate to yield non-turbid samples. Therefore, it was concluded that the well had not been adequately maintained (i.e., silt had been allowed to deposit at the bottom of the well).

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In an effort to ensure adequate monitoring and assessment capabilities of the two upgradient wells at the S-SX Tank Farm, it is requested that the two wells be maintained. Specifically, it is requested that the pump intake be lowered in well 299-W23-14, and that either the silt in well 299-W23-13 be removed, or the pump uptake be adjusted to allow collection of non-turbid samples. It is requested that you respond to this letter within thirty (30) days advising Ecology of well maintenance activities (including schedule) for these two wells.

If you have any questions about this request, please feel free to contact Alisa Huckaby at (509) 736-3034.

Sincerely,



Antonio Valero, Storage Project Manager
Nuclear Waste Program

AV:adh:sb

cc: Marvin Furman, USDOE
Scott Conley, PNNL
Vern Johnson, PNNL
Stuart Luttrell, PNNL
Merilyn Reeves, HAB
Mary Lou Blazek, OOE
Administrative Record: S-SX Tank Farm