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FEB 25 1999

Mr. Stanislaw Leja
 Acting Perimeter Areas Section Manager
 Nuclear Waste Program
 State of Washington
 Department of Ecology
 1315 W. Fourth Avenue
 Kennewick, Washington 99336-6018



Dear Mr. Leja:

NOTIFICATION OF TOTAL ORGANIC CARBON (TOC) EXCEEDANCE AT 1301-N LIQUID WASTE DISPOSAL FACILITY

- References:
- (1) 100-NR-1 Treatment, Storage, and Disposal Units Corrective Measures Study/Closure Plan, DOE/RL-96-39, Rev. 0, U.S. Department of Energy, Richland, Washington. 48688
 - (2) Corrective Measures Study for the 100-NR-1 and 100-NR-2 Operable Units, DOE/RL-95-111, Rev. 0, U.S. Department of Energy, Richland, Washington. 48689
 - (3) RL ltr. to Steve M. Alexander from M. J. Furman, "Notification of Total Organic Carbon (TOC) Exceedance at 1324-N/NA Site," dtd. April 14, 1998 (CCN #058230). 49143

The 1301-N Liquid Waste Disposal Facility is a Resource Conservation and Recovery Act (RCRA) unit in the 100-N Area, which has been monitored under an interim-status detection program (40 CFR 265.92). The average result from quadruplicate samples collected from downgradient well 199-N-3 in September 1998 exceeded the critical mean value for TOC. Verification sampling conducted in January 1999 confirmed the exceedance. The TOC results are provided as an attachment to this letter.

TOC is an indicator parameter under interim-status regulations; however, no organic constituents of concern have been identified in 1301-N waste or sediments (Reference 1). Well 199-N-3 is located near other wells, 199-N-17 and 199-N-18, that contain petroleum contamination from past leaks in diesel and fuel oil tanks and lines between the 1301-N crib and the reactor building (Reference 2). Higher than average river stage in recent years has affected groundwater flow directions in the 100-N Area, increasing the northward component near the 1301-N facility. The occurrence is probably not related to an earlier TOC exceedance at the 1324-N/NA facility (Reference 3), and is believed to reflect a separate contaminant source.

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Mr. Stanislaw Leja

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Because TOC at a downgradient well has been determined to be statistically different from background, the following actions are required:

“...the owner or operator must provide written notice to the Regional Administrator—within seven days ...that the facility may be affecting groundwater quality. [40 CFR 265.93(d)(1)]

Within 15 days after the notification under paragraph (d)(1) of this section, the owner or operator must develop and submit to the Regional Administrator a specific plan... for a groundwater quality assessment program at the facility. [40 CFR 265.93(d)(2)]”

The information in this letter is sufficient to fulfill both requirements. The groundwater quality assessment consists of our determination that the 1301-N facility is not the source of the TOC rise. No further action is required under RCRA. However, further investigation is planned to determine which constituents are causing the change in groundwater quality, since petroleum hydrocarbons are contaminants of potential concern for the 100-NR-2 groundwater operable unit, and also may interfere with the nearby pump-and-treat system.

If you want to discuss this matter further or require additional information, please contact me at 373-9630.

Sincerely,



M. J. Furman, Project Manager
Groundwater Project

GWP:MJF

Attachment

cc w/attach:

J. V. Borghese, CHI
J. Donnelly, Ecology
M. J. Hartman, PNNL
G. C. Henckel III, BHI
S. P. Luttrell, PNNL
R. M. Smith, PNNL

1301-N DOWNGRADIENT WELL 199-N-3 (Critical mean: 1405 µg/L)

Sample event	Result (µg/L)
Original, 9/3/98	1680
	1540
	1440
	1440
Resample, 1/7/99	1590/1690*
	1590
	1800
	1760
Split sample, 1/7/99	2500
	2200
	1600
	1900

*Laboratory analyzed sample twice.