

ROCKY FLATS SITE

REGULATORY CONTACT RECORD 2015-07

Purpose: Vinyl chloride results from the Present Landfill Treatment System (PLFTS) effluent triggered the consultative process.

Contact Record Approval Date: August 31, 2015

Site Contact(s)/Affiliation(s): Scott Surovchak, U.S. Department of Energy (DOE); George Squibb, Linda Kaiser, David Ward, Stoller Newport News Nuclear, Inc. (SN3), a wholly owned subsidiary of Huntington Ingalls Industries, Inc.

Regulatory Contact(s)/Affiliation(s): Carl Spreng, Colorado Department of Public Health and Environment (CDPHE); Vera Moritz, U.S. Environmental Protection Agency (EPA)

Date of Consultation Meeting: July 22, 2015

Consultation Meeting Participants: Carl Spreng, CDPHE; Vera Moritz, EPA; Scott Surovchak, DOE; Linda Kaiser, SN3, David Ward, SN3

Discussion: As part of the Present Landfill closure, a passive seep interception and treatment system was installed to treat volatile organic compounds (VOCs) in landfill seep water and Groundwater Intercept System (GWIS) water. There are three sources of influent to the treatment system: two GWIS pipes and the Present Landfill seep. Effluent from the treatment system eventually flows to the former Landfill Pond area.

As required by the *Rocky Flats Legacy Management Agreement* (RFLMA) Attachment 2, Table 2, "Water Monitoring Locations and Sampling Criteria," the Present Landfill Treatment System (PLFTS) effluent monitoring requirements consist of routine quarterly sampling for VOCs, semivolatile organic compounds, and metals to evaluate remedy performance. In accordance with RFLMA Attachment 2, Figure 11, "Groundwater Treatment Systems," an exceedance of a surface-water standard at the PLFTS effluent monitoring location (PLFSYSEFF) triggers monthly effluent sampling to provide additional data for evaluation. If exceedances continue for three consecutive samples during the subsequent increased-frequency sampling period, sampling is triggered at location NNG01 (downstream of the former Landfill Pond area) for those constituents in question. Concurrently, consultation between the RFLMA parties takes place to determine whether a change in the remedy is required, if additional parameters need to be analyzed, or if a modification of the monitoring plan is warranted.

The routine quarterly effluent sample collected on 3/11/2015 (Table 1) showed a vinyl chloride concentration exceeding the practical quantitation limit (PQL) of 0.2 microgram per liter ($\mu\text{g/L}$) standard from the RFLMA Attachment 2, Table 1, "Surface Water Standards." (As a point of reference the 0.2 $\mu\text{g/L}$ is based on the water supply standard and neither Walnut Creek nor Big Dry Creek have drinking water supply intakes.) Subsequent sampling at the increased frequency showed three consecutive vinyl chloride concentrations also exceeding the RFLMA PQL, which

triggered sampling at location NNG01 and consultation. The Site PQL of 0.2 µg/L is well below the drinking water standard (i.e., the maximum contaminant level of 2.0 µg/L).

Location NNG01 was sampled on 7/27/2015 (Table 2), and vinyl chloride was not detected.

Similar situations occurred in 2007 and 2014. The RFLMA parties took no additional actions, and the sampling protocol returned to the routine quarterly sampling at PLFSYSEFF for those occurrences.

The RFLMA parties have consulted regarding the results summarized in Tables 1 and 2 and have agreed to continue the RFLMA sampling protocol with no changes or additional actions.

Table 1. Present Landfill Treatment System Effluent (PLFSYSEFF): Summary of Analytical Results

Analyte	Sample Date	Result ^a	Units	RFLMA Attachment 2, PQL
Vinyl Chloride	3/11/2015	0.23	µg/L	0.20
	4/28/2015	0.24	µg/L	0.20
	5/28/2015	0.26	µg/L	0.20
	6/29/2015	0.25	µg/L	0.20

Notes: The initial result triggering monthly sampling is shown in **bold**. The routine quarterly samples are shown in italics.

^a All results are J qualified. "J qualified" means the analyte was positively identified. The associated numerical value is an estimated quantity.

Table 2. Former Landfill Pond Area Outflow (NNG01): Summary of Analytical Results

Analyte	Sample Date	Result ^a	Units	RFLMA PQL
Vinyl Chloride	7/27/2015	<0.10	µg/L	0.20

Notes: The 6/29/2015 PLFSYSEFF result (Table 1) was received on 7/21/2015, triggering sampling at NNG01.

^a The result is U qualified. "U qualified" means the analyte was not detected at a concentration greater than the method detection limit.

Resolution: Carl Spreng, CDPHE, approved this contact record.

Closeout of Contact Record: This contact record will be closed when it is posted on the Rocky Flats Site website.

Contact Record Prepared by: David Ward and George Squibb

Distribution:

Carl Spreng, CDPHE
Scott Surovchak, DOE
Vera Moritz, EPA
Linda Kaiser, SN3
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