

# ROCKY FLATS SITE

## REGULATORY CONTACT RECORD 2015-03

---

**Purpose:** Original Landfill (OLF) Immediate Response to Recent Precipitation

---

**Contact Record Approval Date:** May 26, 2015

**Site Contact(s)/Affiliation(s):** Scott Surovchak, U.S. Department of Energy (DOE); Kurt Franzen, 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:** May 13 and 14, 2015

**Consultation Meeting Participants:** Carl Spreng, CDHPE; Scott Surovchak, DOE; Kurt Franzen, SN3; David Ward, SN3, John Boylan, SN3

---

**Introduction:** The past several weeks of precipitation events have led to unusually high groundwater volumes that, in turn, have caused portions of the Original Landfill (OLF)—particularly in the area of the East Perimeter Channel (EPC)—to subside. This movement is evident over daily to weekly periods and is appearing as surficial cracks, settling (depressions), or rotational slumping. Repairs that have been completed on these features have needed to be repeated multiple times because the ground surface continues to move. These repairs have not been able to keep up with the recent movements.

Since the movement is being caused by excessive groundwater, it is necessary to improve control of this moisture. Action is urgently needed to drain and divert as much surface water and groundwater as possible away from the eastern edge of the OLF cover and the EPC. The pre-existing subsurface drain in this area appears to have been compromised, based on the presence here of seeps and pools on the surface. Therefore, this action may include drilling or digging holes greater than 3 feet deep to locate and intersect the groundwater and this drain, repairing and potentially reconfiguring this drain, and then diverting the water away from the OLF cover and EPC.

Localized instability of the EPC first occurred as the result of the rain event from September 9 through September 16, 2013, and was identified as a reportable condition in Contact Record 2013-02, dated September 18, 2013. The efforts to repair, reconfigure, and stabilize the EPC that are listed in Contact Record 2013-03 and modified in Contact Record 2014-09 were completed in January 2015. Since that time the Site has received over 11 inches of precipitation and movement of the ground surface in this area has resumed.

Although the effort to correct the EPC is an ongoing, reportable condition, its current status requires immediate action. CDPHE was notified on May 13, 2015, of the potential need to

excavate holes greater than 3 feet deep in order to investigate the subsurface drain and dewater the area. CDPHE and DOE walk down the OLF on May 14, 2015, and agreed this action is an immediate need to dewater and stabilize the EPC and the eastern portion of the OLF cover.

*Rocky Flats Legacy Management Agreement (RFLMA)*, Attachment 2, Section 4.0, “Institutional Controls,” provides that “Except for situations where immediate action is warranted, DOE will not implement the activity for which the regulatory determination is required until 10 calendar days after the contact record or written correspondence approving the activity is posted on the Rocky Flats website and notification of the posting is made to stakeholders in accordance with the RFLMA Public Involvement Plan.”

**Discussion:** During the walk down on May 14, 2015, of the EPC and OLF cover, representatives of the DOE and CDPHE determined that immediate action is warranted to get the water off of, or out of, the EPC and OLF cover. To achieve this, it would be appropriate to start excavating to depths greater than 3 feet deep to locate and intercept the groundwater and subsurface drain as soon as practicable and not wait 10 days after posting of a contact record. The area is currently saturated. A third-party geotechnical engineer with extensive knowledge of the OLF is currently evaluating where and how deep to dig. One or more localized subsurface drains may be added. Longer-term actions are also being evaluated.

Efforts are already underway to drain the surface water off the face of the OLF cover with shallow trenching and flexible piping. The sampling of the RCRA wells in the vicinity of the OLF was completed recently and the results will be available in June. The surface water monitoring location downstream of the OLF in Woman Creek (GS59) was collected as a composite sample in a carboy. The last carboy, which covers the period from May 9 to May 18, was collected on May 18, 2015. These results will also be available in June.

The *Original Landfill Monitoring and Maintenance Plan*, Section 6.0, “Reporting and Contact Information,” requires “DOE will follow RFLMA requirements for reportable conditions, and potentially impacted communities will be notified immediately of conditions that occur at any time that require immediate attention.” The potentially impacted communities were notified on May 14, 2015, of the need to take immediate action with the EPC and OLF cover.

**Resolution:** CDPHE agrees with the need to take immediate action to remove surface water and groundwater from the EPC and the OLF. DOE has started surface water removal and is preparing to intercept groundwater as soon as practicable.

Any interim or long term plans for addressing the EPC and the OLF cover that require a regulatory determination, and is not immediate action, will be documented in a later contact record posted on the Rocky Flats webpage as required by the RFLMA process.

Progress of this work will be reported by DOE in RFLMA quarterly and annual reports of surveillance and maintenance activities for the period(s) in which these activities occur.

**Closeout of Contact Record:** This Contact Record will be closed when the work is completed, post-construction reseeding has been performed, and post-construction erosion controls are in place.

**Contact Record Prepared by:** David Ward

RFLMA Contact Record 2015-03

---

**Distribution:**

Carl Spreng, CDPHE

Vera Moritz, EPA

Scott Surovchak, DOE

Linda Kaiser, SN3

Rocky Flats Contact Record File