

# ROCKY FLATS SITE REGULATORY CONTACT RECORD

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**Purpose:** Minor modification to the March 2008 Present Landfill (PLF) Monitoring and Maintenance Plan (M&M Plan)

**Contact Record Approval Date:** February 18, 2014

**Site Contact(s)/Affiliation(s):** Scott Surovchak, U.S. Department of Energy (DOE); Rick DiSalvo, S.M. Stoller Corporation (Stoller); Linda Kaiser, Stoller; Jeremiah McLaughlin, Stoller; David Ward, Stoller

**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:** Initial consultation on October 16, 2012, and documented in Contact Record (CR) 2012-03, with follow-on consultation on March 13 and August 26, 2013

**Consultation Meeting Participants:** Carl Spreng, CDPHE; Vera Moritz, EPA; Scott Surovchak, DOE; John Boylan, Stoller; Rick DiSalvo, Stoller; Linda Kaiser, Stoller; George Squibb, Stoller; Jody Nelson, JGMS, Inc.

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**Introduction:** A minor modification to the *Rocky Flats Legacy Management Agreement* (RFLMA) Attachment 2, "Legacy Management Requirements" (RFLMA Attachment 2), was approved by CDPHE and EPA on February 21, 2013. The scope of the minor modification is described in RFLMA Contact Record 2012-03.

As part of the minor modification, RFLMA Attachment 2, Table 3, "Present and Original Landfill Inspection and Maintenance Requirements," was modified to remove landfill-specific vegetation and inspection requirements as recommended in the third 5-year review report. Landfill vegetation meets success criteria, and it will be monitored and managed under the site-wide vegetation and revegetation plans.

The RFLMA Attachment 2 modification also included, among other things, updates to maps to reflect the surface water configuration after breaching the dams for the Pond A-3 and the PLF Pond in 2012. The dam breach project is discussed in CR 2011-07. Prior to this modification, RFLMA Attachment 2 maps reflected the dam breach for Ponds A-1, A-2, and B-1 through B-4 completed in 2009, as discussed in CR 2008-02.

As discussed in CR 2012-03, minor modifications to the Original Landfill and PLF M&M Plans for vegetation monitoring were to be proposed. This contact record is for the PLF M&M Plan modification.

In addition to the vegetation monitoring requirements, several other items are proposed in this modification, as follows:

- Update to Figure 1–2, “PLF Site Map,” which shows the location of the PLF within the Central Operable Unit (COU), to reflect the COU surface water configuration after completion of the dam breach projects in 2009 and 2012.
- Update to Figure 2–1, “PLF Surface Features,” to reflect the PLF Pond dam breach. The historic subsurface asbestos disposal location at the northeast end of the PLF cover will also be added to Figure 2–1 for reference.
- Update to Figure 5–1, “PLF Seep Treatment System,” to reflect the PLF Pond (labeled as the East Landfill Pond) dam breach. Figure 5–1 will also show the RFLMA sampling location identified as NNG01, which replaced the sampling location identified as PLFPONDEFF “Pond Sample Location,” as discussed in RFLMA Contact Record 2010-04.
- Changes to Appendix A, “Present Landfill Inspection Forms” to remove the vegetation inspection form and to delete the figure, “PLF Inspections,” which is redundant to Figure 2–1.

Several editorial changes and clarifications will be included in the PLF M&M Plan minor modification, as described in more detail below.

Pursuant to RFLMA paragraph 66, DOE, CDPHE, and EPA do not consider these items to constitute a significant change from existing requirements of RFLMA, and this contact record shall be used to provide public notice of the proposed minor modifications. DOE will submit the proposed modifications to CDPHE and EPA for review, and CDPHE may approve modifications to RFLMA attachments pursuant to RFLMA paragraph 65.

**Text Changes:** PLF M&M Plan text that is proposed to be deleted is shown in single-line strikethrough, and new text is shown in underline. Proposed modifications to figures are summarized in the Introduction, above.

#### 1. Section 1.0 “Introduction”

This Monitoring and Maintenance Plan and Post-Closure Plan (M&M Plan) applies to the Present Landfill (PLF) (Individual Hazardous Substance Site [IHSS] 114) at the Rocky Flats Site (Rocky Flats). The PLF M&M Plan was approved in 2006 and was modified in 2008. This PLF M&M Plan ~~is a~~ incorporates a minor modification of the ~~original~~ PLF M&M Plan, ~~approved in May 2006~~ as described further in this section, below.

...

~~The May 2006 PLF M&M Plan referenced RFCA in certain sections. This modified M&M Plan is based on the outcome of consultation in accordance with RFLMA consultative process as documented in Regulatory Contact Record 2007-08, which was approved December 21, 2007. Therefore, this modified PLF M&M Plan revises the original PLF M&M Plan text as appropriate to recognize the implementation of the remedy under RFLMA. It also incorporates changes in inspection frequencies, completion of certain monitoring requirements that now may be phased out, clarification of vegetation inspection schedules and completion criteria, as anticipated in the original PLF M&M Plan.~~

The 2008 PLF M&M Plan modification and this modification were based on the outcome of consultation in accordance with RFLMA consultative process as documented in RFLMA Contact Record (CR) 2007-08, approved December 21, 2007, and CR 2014-02, approved (insert approval date here).

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## 2. Section 1.1 “Purpose”

The PLF M&M Plan is designed to meet the following objectives:  
(The following abbreviation is used in the material in this section: Present Landfill Treatment System [PLFTS].)

....

3. Present the PLFTS ~~and East Landfill Pond~~ Environmental Monitoring Plan (Section 5.0).

....

## 3. Section 1.3 “Site Operations”

...The PLF eventually consumed the West Landfill Pond; the earthen dam for the PLF Pond (also known as the East Landfill Pond) was breached in 2012 as described in CR 2011-07 is still present.

## 4. Section 2.1 “Topography”

... Perimeter drainage channels were built to control surface water run-on and runoff and are sloped to drain to the east of the PLF below the ~~East Landfill~~ former PLF Pond dam. ...

## 5. Section 2.2 “Hydrology”

... On the northern side of the PLF, the western portion of the perimeter channel runs under a perimeter road through a culvert and east into a natural drainage that eventually joins the No Name Gulch drainage ~~below~~ (east of) the ~~East Landfill~~ former PLF Pond dam. The northeastern portion of the channel empties into the same natural drainage that eventually joins No Name Gulch ~~below the East Landfill Pond dam~~. On the southern side of the PLF, the perimeter channel runs eastward ~~above the East Landfill Pond~~ and drops into the No Name Gulch drainage ~~below the dam~~ (Figure 2-1).

...

A diversion berm constructed at the top of the east slope directs surface water from the cover away from the east face and into the perimeter channels. ~~These channels and diversion berms limit runoff into the East Landfill Pond.~~

~~The East Landfill Pond covers approximately 2.5 acres. Recharge to the pond occurs from direct precipitation, groundwater discharge, PLFTS effluent, and surface water runoff from the surrounding hillslopes, including surface water discharge from the two riprap channels~~

~~constructed on the east face of the PLF. Groundwater discharge is likely limited because of the relatively low hydraulic conductivity of the underlying weathered bedrock. At the discretion of DOE, the outlet valve in the dam may be left in the open position to limit the Pond water level, resulting in a maximum surface water area of approximately 0.8 acre; or the valve may be closed to increase the associated wetland vegetation. Pond discharge via the emergency overflow spillway will only occur if and when the operations are changed or there is an abnormal condition.~~

6. Section 2.5.5, “Former East Landfill Pond”

~~The dam for the East Landfill Pond (also referred to as the PLF Pond) was breached in 2012 and the area was filled and contoured to improve riparian habitat and to configure the No Name Gulch drainage to the approximate conditions prior to construction of the dam. will remain and receive treated water from the PLFTS and surface water from the east face and surrounding hillsides, as well as precipitation falling directly into the Pond. Monitoring of the Pond in No Name Gulch is discussed in Section 5.0.~~

7. Section 3.5,” Vegetation”

~~... Vegetation inspections will ensure that vegetation on the PLF cover is established properly. Maintenance of the cover vegetation will be consistent with the Revegetation Plan (DOE 2005a 2009) and the Vegetation Management Plan (DOE 2006b 2012) for site-wide vegetation management.~~

8. Section 3.5.1 “Monitoring Locations and Procedures”

~~Vegetation at the PLF will be monitored by visual inspection by traversing the cover and visually inspecting for the health of the vegetation and for unwanted vegetation such as weeds. In addition, the vegetation at the PLF will be monitored annually as described in the Revegetation Plan. Once the success criteria listed below (from the Revegetation Plan) have been met, and quantitative vegetation monitoring will be has been discontinued. The major goals of the plan are:~~

~~Quantitative grassland success criteria:~~

- ~~1. A minimum of 30 percent relative foliar cover of live desired species (seeded native species and/or non-seeded native species).~~
- ~~2. A minimum of 60 percent total ground cover comprised of litter cover, current year live vegetation basal cover, and rock cover.~~
- ~~3. A minimum of 50 percent of the seeded native species will be present at the revegetation site.~~
- ~~4. No single species will contribute more than 45 percent of the relative foliar cover (except in areas where dominance by a single species is appropriate for long-term wildlife and habitat management objectives).~~

~~...~~

9. Section 5.0 “Present Landfill Seep and ~~East Landfill Pond~~ Environmental Monitoring Plan” (The following abbreviation is used in the material in this section: data quality objective [DQO].)

... Effluent from the PLFTS eventually flows to the ~~East Landfill Pond~~ No Name Gulch. This section presents the monitoring plan for ~~the PLFTS influent and effluent as well as the East Landfill Pond~~, as required by the DQO process, if PLFTS effluent exceeds RFLMA Attachment 2, Table 1, “Surface Water Standards.”

10. Section 5.1 “Purpose and Requirements”

The ~~PLF Seep and East Landfill Pond~~ Monitoring Plan is implemented to determine surface water quality impacts of the PLF. ...

11. Section 5.2 “Data Quality Objectives”

... ~~PLFTS influent, effluent, and East Landfill Pond (when required) monitoring~~ Monitoring results will be evaluated in accordance with RFLMA Attachment 2, Figure 11, “Groundwater Treatment Systems,” which incorporates the DQO process.

12. Section 5.3 “Sample Locations”

... ~~If East Landfill Pond sampling is required as discussed in Sections 5.1 and 5.2, a sample will be collected near the pond discharge location~~ In addition, sampling at NNG01 (Figure 5-1) may be required in accordance with RFLMA Attachment 2, Figure 11, “Groundwater Treatment Systems,” if PLFTS effluent exceeds RFLMA Attachment 2, Table 1, “Surface Water Standards.”

13. Section 5.6 “Reporting and Schedule”

PLFTS and ~~East Landfill Pond~~ NNG01 sampling results will be included in the quarterly and annual reports specified in RFLMA Attachment 2, Section 7.0, “Periodic Reporting Requirements.” ...

14. Section 6.1 “Reporting”

The annual PLF monitoring report, including inspection results, repairs, groundwater monitoring data, PLFTS monitoring data, and ~~East Landfill Pond~~ NNG01 monitoring data if applicable, will be submitted as part of the RFLMA annual report. ... The annual PLF monitoring report will include at a minimum: ...

- All inspection forms/reports for the year, ~~including vegetation information~~; ...
- Tables with ~~East Landfill Pond~~ NNG01 sampling results if applicable;
- Figures with groundwater monitoring points, ~~East Landfill Pond monitoring points~~ NNG01, and location(s) of problems and/or repairs; and
- Groundwater and seep/PLFTS/~~East Landfill Pond~~ NNG01 water sampling forms, as appropriate.

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**Closeout of Contact Record:** This contact record will be closed when the PLF M&M Plan minor modification is approved.

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

**Contact Record Prepared by:** Rick DiSalvo

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**Distribution:**

Carl Spreng, CDPHE

Scott Surovchak, DOE

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Linda Kaiser, Stoller

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