

## ROCKY FLATS STEWARDSHIP COUNCIL

Monday, November 1, 2021

8:30 – 10:35 AM

Virtual Meeting via WebEx

**Board members in attendance:** Nancy Ford (Director, Arvada), Sandra McDonald (Alternate, Arvada), Clare Levy (Director, Boulder County), Sam Weaver (Director, City of Boulder), Mirabai Nagle (Alternate, City of Boulder), Deven Shaff (Director, Broomfield), Heidi Henkel (Alternate, Broomfield), David Allen (Alternate, Broomfield), Jim Dale (Director, Golden), Bill Fisher (Alternate, Golden), Pat O’Connell (Alternate, Jefferson County), Joyce Downing (Director, Northglenn), Shelley Stanley (Alternate, Northglenn), Mark Lacin (Director, Superior), Jan Kulmann (Director, Thornton), James Boswell (Alternate, Thornton), Kathryn Skulley (Director, Westminster), Rich Seymour (Alternate, Westminster), Trea Nance (Alternate, Westminster), Jeannette Hillery (Director, League of Women Voters), Linda Porter (Alternate, League of Women Voters), Murph Widdowfield (Director, Rocky Flats Cold War Museum), Kim Griffiths (Director/Citizen)

**Stewardship Council staff members and consultants in attendance:** David Abelson (Executive Director), Melissa Weakley (Technical Program Manager), Barb Vander Wall (Seter & Vander Wall, P.C)

**Attendees:** Gwen Hooten (DOE-LM), Andy Keim (DOE-LM), Padraic Benson (DOE-LM), Alison Kuhlman (DOE-LM), Nicole Lachance (RSI Entech), Dana Santi (RSI Entech), John Boylan (RSI Entech), George Squibb (RSI Entech), Harry Bolton (RSI Entech), Jody Nelson (RSI Entech), Chris Stewart (RSI Entech), Karin McShea (RSI Entech), Patti Gallo (RSI Entech), Ryan Wisniewski (RSI Entech), Faith Anderson (RSI Entech), Yvonne Deyo (RSI Entech), Lindsey Murl (CDPHE), Lindsey Archibald (CDPHE), Ashley Witkovich (Northglenn), Laura Hubbard (Broomfield), Shirley Garcia, Carl Spreng, Lynn Segal, Giselle Hertzfeld, Usama Khalid, Joan Seeman, Chris Allred, Jake Moyer, Nathan Krohn

**Convene/Agenda Review:** Joyce Downing convened the meeting at 8:30 am.

### **Public Comment**

*Lynn Segal:* Lynn spoke about technical difficulties with accessing the Stewardship Council virtual meetings.

*Usama Khalid:* Usama wanted to acknowledge indigenous tribes that were the original stewards of the land. She also encouraged the Stewardship Council to include more diverse representation on the Board.

*Giselle Herzfeld:* Giselle referred to the Rocky Flats Stewardship Council budget and the fact that most of the funding comes from the DOE. She spoke about her concern that this creates an incentive for the Stewardship Council leadership to promote the DOE narrative at Rocky Flats. She believes this is to uphold the nuclear weapons complex more than protecting public safety. She also expressed her concern about what she viewed as racist language referring to ‘illegal aliens’ on page 15 of the Board packet. Barb Vander Wall explained that the law that this language was based on was recently changed and this can be addressed during the upcoming contract discussion.

*Chris Allred:* Chris pointed out that the new Board member application requires that conflicts of interest be shared, but he believes that the Stewardship Council itself has a conflict of interest due to receiving

most of its funding from DOE. He believes that DOE funding should be rejected. He also spoke about broader concerns about historical and continuing activities related to the production of nuclear weapons and the effects on surrounding populations.

*Joan Seeman:* Joan called Rocky Flats a Superfund site currently in operations and maintenance. She said the Five-Year Review was very important and the community was unaware it was happening. She asked whether the Stewardship Council had formally responded to any of the previous Five-Year Reviews. She referred to a DOE/EPA/CDPHE fact sheet on Rocky Flats that promoted residential development. She said no health risk assessment was completed at Rocky Flats for all contaminants combined. She was also concerned about the lack of air monitoring at Rocky Flats.

**Consent Agenda:** The consent agenda included the checks written since the September 13, 2021, meeting, and a contract amendment (to include revised language replacing ‘illegal aliens’). Jeannette Hillery moved to approve consent agenda. The motion was seconded by Jan Kulmann. The motion passed 14-0.

**Executive Director’s Report:** David Abelson began by noting that this meeting would be the last for five elected officials: Nancy Ford (Arvada), Sam Weaver (Boulder), Mirabai Nagle (Boulder), Jim Dale (Golden), and Joyce Downing (Northglenn). He thanked each for their service to their communities and for their service to the Stewardship Council. David also thanked Joyce for her committed, steady leadership as the chair of the Stewardship Council, noting that the position requires looking beyond one’s own personal and governmental interest and placing the Stewardship Council first. It requires being a leader in the truest and best sense of the word, and Joyce embodied that vision. Due to the turnover, David said that at the April 4, 2022, meeting, he would discuss the role of the Stewardship Council. Finally, David mentioned that the Environmental Protection Agency would begin a nationwide rulemaking to list certain PFAS chemicals under the federal Resource Recovery and Conservation Act (RCRA).

**2022 Work Plan – Approval:** David noted that the work plan was presented and discussed at the September 2021 meeting. Nancy Ford referred to the part of the workplan that mentions working with DOE on the development of interpretive signage for Rocky Flats “as opportunities allow.” She expressed her displeasure with the lack of input and influence by the Stewardship Council on this issue.

Jan Kulmann moved to approve the 2022 Work Plan. The motion was seconded by Roman Kohler. The motion to accept the work plan passed 14-0.

**2022 Budget – Budget Hearing and Adoption:** The Board reviewed the draft budget at the September 2021 meeting. No changes were offered. Prior to finalizing the budget, the Board must hold a budget hearing and allow time for public comment. Following the public hearing, the Board must approve the budget resolution.

Barb Vander Wall explained the budget hearing process, in which the Chair opens the hearing, comments are received and then the Chair closes the hearing. She explained that the Stewardship Council is a unit of local government, a political subdivision under Colorado law, and that one of its obligations is to adopt a budget on an annual basis showing its revenues and expenditures. This process is to be completed by the end of the year and filed by the end of January. A notice of this public budget hearing was published.

Joyce Downing officially opened the hearing for the 2022 budget. She asked for public comments. Chris Allred expressed concern about DOE funding and conflicts of interest involving the Stewardship Council and its paid staff. He stated his belief that the Stewardship Council should be reorganized with an elected official serving as Executive Director, since this would be someone who was accountable to citizens. He urged the Stewardship Council to reject DOE funding. Lynn Segal commented on the lack of attendance at the Stewardship Council meetings. She also spoke about her mother dying from cancer, explaining that if the Stewardship Council accepts grant funding from DOE they are contributing to the continuation of that legacy.

Jim Dale moved to approve the 2022 Budget. The motion was seconded by Jan Kulmann. The motion to accept the budget passed 14-0.

**Community Representatives Appointments:** Joyce noted that there had been three applicants for the two open non-governmental seats on the Stewardship Council. They were the League of Women Voters, the Rocky Flats Homesteaders, and the Friends of the Front Range Wildlife Refuge. She said that the application from the Friends of the Front Range Wildlife Refuge had been withdrawn. Since the remaining two applicants are existing members of the Stewardship Council, Joyce suggested that the interview step be waived and that the Stewardship Council move forward with approval.

Nancy Ford commented that the application from the League of Women Voters was not very thorough in terms of explaining the value that they bring to the Stewardship Council. She further stated she does not recall that the League had sent members to the meetings, and generally questioned whether they were involved as claimed in the application. David Abelson noted that the League, and their representative Jeannette Hillery, have been very involved in attending meetings, serving on the Executive Committee, and even serving as Chair. Jeannette went on to detail her history being involved in Rocky Flats issues long before the Stewardship Council existed. She said she had attended nearly every Stewardship Council meeting over the past 14 years and has expertise in understanding water quality issues affecting Rocky Flats.

Claire Levy asked whether these appointments were for the organizations or for the individuals. David explained that the organizations are appointed to the Stewardship Council, and they select a member and an alternate. Jim Dale commended the League of Women Voters on all their efforts, and he finds their work very thoughtful and meaningful. Roman Kohler noted that the Homesteaders were chartered in the 1980s and that he has been involved since the 1990s. He said that they are focused on issues involving former workers and related exposure from their time at Rocky Flats.

Jan Kulmann moved to appoint the League of Women Voters and Rocky Flats Homesteaders to the Stewardship Council for a two-year term commencing February 2022. The motion was seconded by Deven Shaff. The motion passed 10-0 (only local governments vote to appoint members.)

**Host DOE Quarterly Meeting:** DOE was on hand to brief regarding on the second quarter 2021 Report. The Rocky Flats Site remedy components include:

- Maintain two landfill covers
- Maintain three groundwater treatment systems
- Monitor surface water and groundwater

- Maintain physical controls
  - Signage
  - Access restriction
- Institutional controls
  - No occupied building construction
  - Excavation and soil-disturbance restrictions
  - No surface water consumption or agricultural use
  - No groundwater wells, except for monitoring
  - Protection of landfill covers and engineered remedy components

Activities included surface water monitoring, groundwater monitoring, ecological monitoring, and site operations (inspections, maintenance, etc.).

**Surface Water Monitoring – George Squibb**

George began with a quick review of the monitoring requirements and map of locations and monitoring sites, noting the list of constituents which are monitored.

Performance monitoring of the Original Landfill (OLF) included routine surface water sampling in Woman Creek, downstream of the OLF (GS59). Results for the second quarter of 2021 showed mean concentrations for all analytes below applicable RFLMA water quality standards

At the Present Landfill Treatment System (PLFTS) system effluent, concentrations for all analytes were below applicable RFLMA standards in the second quarter.

George moved on to a review of Point of Evaluation (POE) monitoring at GS10. The 12-month average uranium concentration for April 30 triggered a reportable condition. The concentration was 18.1 mg/L, above the 16.8 mg/L RFLMA standard.

- Validated data were received June 3, formal notification to regulators and stakeholders was made on June 17.
- The 12-month average on May 31 was 12.4 mg/L, ending the reportable condition.
- Uranium concentrations at the downstream Point of Compliance (POC) WALPOC have remained well below 16.8 mg/L.
- Contact Record 2021-02 documents the RFLMA consultation and path forward.

At the POE SW027, the 12-month average plutonium concentration for April 30 triggered a reportable condition. The concentration was 0.9 pCi /L, above the 0.15 pCi /L RFLMA

- Validated data were received June 11, formal notification to regulators and stakeholders was made on June 24.
- The 12-month average on May 31 was 0.061 pCi /L, ending the reportable condition
- Plutonium concentrations at the downstream POC WOMPOC have remained well below 0.15 pCi/L.
- Contact Record 2021-03 documents the RFLMA consultation and path forward.

No other POE analyte concentrations were reportable during the second quarter and no POC concentrations were reportable during the quarter.

Shelley Stanley asked George to share with the public how they can receive the notices of exceedances or contact records. George said he would check on this. He added that there is an email address people can use to send in questions and comments – [rinfo@lm.doe.gov](mailto:rinfo@lm.doe.gov)

### ***Groundwater Monitoring – John Boylan***

John first reviewed the RFLMA monitoring network, which includes:

- 10 Resource Conservation and Recovery Act (RCRA) wells (sampled quarterly to evaluate potential impacts from OLF and PLF)
- 9 Area of Concern (AOC) wells and one Surface Water Support location (sampled semiannually). These are located in drainages downstream of contaminant plumes and are evaluated for plumes discharging to surface water
- 27 Sentinel wells (sampled semiannually). These are downgradient of treatment systems, edges of plumes, and in drainages, and are used to look for plumes migrating to surface water and treatment system problems
- 42 evaluation wells (sampled biennially). These are located within plumes, near source areas, and interior of Central Operable Unit (COU) and are used to evaluate whether monitoring of an area or plume can cease
- 9 treatment system locations (seven are sampled semiannually, and two are quarterly)

During the second quarter, all wells except the Evaluation wells were sampled. Results were generally consistent with previous data. Data will be evaluated as part of the 2021 annual report.

John next provided updates on the Mound Site Plume Collection System (MSPCS), East Trenches Plume Treatment System (ETPTS), Solar Ponds Plume Treatment System (SPPTS), and PLFTS. Activities included:

- Routine maintenance at all systems
- Replaced effluent pump at ETPTS
- Adjusted nutrient dose rate at SPPTS as air temperatures warmed
- Continued evaluating groundwater conditions west of existing SPPTS collection trench

### ***Site Operations – Harry Bolton***

Harry reported that, as required, RFLMA physical controls were verified during the quarter. Signs were inspected in May, and all were found to be in good condition and legible.

At the Original Landfill, monthly inspections performed April 23, May 17, and June 25. Erosion rills were observed during inspections above Berms 5 and 6, above the east subsurface drain outfall channel, and along the west perimeter. All have since been repaired.

Weather-related inspections were performed May 5 and June 29. Erosion rills above Berms 5 and 6 were found and have since been repaired and sediment removed.

Maintenance was performed on the OLF on April 12. Eight depressions aligning with gaps between anchor blocks above east Berm 6 were filled in with hand tools using surrounding soil. No reappearance was seen later in the quarter.

Additional maintenance was performed May 18 -20:

- Rills and gullies along West Perimeter Channel repaired with excavator, reseeded, covered in Turf Reinforcement Matting (TRM) and GeoRidges
- Rill between West Perimeter Channel and Berm 3 channel smoothed with hand tools and covered in in TRM
- Rills above Berms 5 and 6 smoothed with hand tools
- Sediment removed from perimeter channel GeoRidges (and throughout quarter)

Settlement monuments at the OLF were surveyed on June 1. Vertical settling was within design limits. Areas of stabilization activities remain stable and in good condition.

At the Present Landfill (PLF), the quarterly inspection was combined with a weather-related inspection on May 5. An additional weather-related inspection was performed on June 29. The PLF is in good condition.

At the former Building Areas 371, 771, 881, and 991, a quarterly inspection was completed in combination with a weather-related inspection on April 28, 2021. No new erosion, subsidence or anomalies were observed.

At the North Walnut Creek Slump, continued data collection from inclinometers and piezometers was conducted where possible. Other notes about this location include:

- Slump monitoring points were surveyed on April 7, May 10, and June 1
- Vertical and lateral hillside movement both approximately 0.70 feet on average
- Total vertical movement since baseline (September 5, 2017) was approximately 4.3 feet

Shelley Stanley asked how much material was needed to fill the depressions caused by the anchor blocks on the OLF. Harry said this was done with hand tools and a bucket, so it was a very small amount. Jeannette Hillery asked whether they were seeing much growth on the revegetation in stabilization areas. Harry said it has come in extremely well, much better than expected. Jeannette asked whether revegetation would help with stabilization on the North Walnut Creek slump. Harry said the movement in that area appears to be at depth. He said the main focus at that site was to preserve groundwater collection and treatment, but stabilization was done as needed. Nancy Ford asked if there was a requirement to wet down soils when they do any excavation. Harry said the requirement is for zero dust, so they do their best effort at that. Nancy Ford asked about why there was not concern about the public being exposed to dust while recreating on the Refuge. Harry explained that they are very careful when conducting potential dust-producing activities, especially any construction, and if anything was observed that could be unsafe, they do not hesitate to shut down these activities. He further added that the concern with dust was silica, not radionuclides.

### ***Ecology – Jody Nelson***

Jody provided an update on several ecology activities at the site. These included:

- Weed mapping
- Nest box surveys
- Wetland water level monitoring
- Seeded showy milkweed monitoring
- Game camera monitoring

- Commercial herbicide applications (approximately 141 acres treated)
- Contractor spot herbicide applications (small targeted applications)
- Prairie dog surveys (no active prairie dog towns in or near COU)
- Preparing for third quarter revegetation monitoring, Preble’s mouse monitoring, wetland monitoring, and other activities

Shelley Stanley brought up past use of biological agents to control weeds and asked whether they were still being used, or if they had become established. Jody said that many have been established. He said there was a list of these in the Vegetation Management Plan on the website. If any new ones come out, they will continue to utilize as available.

**Five-Year Review – Patti Gallo**

Patti provided the group with an overview of the upcoming Rocky Flats Five-Year Review. In terms of background, the remedy selected in the Corrective Action Decision/Record of Decision (CAD/ROD) is comprised of institutional and physical controls, incorporating continued monitoring and maintenance.

The purpose of the Five-Year Review is to determine if a site remedy is protective of human health and the environment. The team completing the review is composed of the U.S. Department of Energy, Office of Legacy Management (LM), U.S. Environmental Protection Agency (EPA), Colorado Department of Health and Environment, and the LM contractor.

The fourth Rocky Flats Site Five-Year Review was completed in August 2017. Results then showed that: “The remedy at the COU is protective of human health and the environment”.

- [https://www.lm.doe.gov/Rocky\\_Flats/Regulations.aspx](https://www.lm.doe.gov/Rocky_Flats/Regulations.aspx)

Patti reviewed the steps for completing the Five-Year Review:

- Notify Public
  - Start public notice in September 2021
  - End notice planned for August 2022
- Document and Data Review
  - CAD/ROD and amendment, Explanation of Significant Differences
  - Applicable documents in this Five-Year Review period (2017 through 2021)
    - RFLMA annual and quarterly reports, contact records, site inspections
  - Monitoring data set comprises validated data from January 2017 through December 2021
- Site Inspection
  - Annual RFLMA inspection results through spring 2022 (expected next inspection)
- Assess Protectiveness
  - Technical Assessment
  - Protectiveness Statement

Patti explained more details about the Technical Assessment. Remedial Action Objectives must be considered during the technical assessment. The assessment addresses three questions to assess the protectiveness of a remedy:

- Is the remedy working?
- Are exposure assumptions still valid?

- Is there anything else to consider?

Potential Protectiveness Statements can include:

- Protective
- Short -Term Protective
- Will be Protective
- Protection Deferred
- Not Protective

Five-Year Review conclusions will be based on information reviewed and technical assessment results, LM will document the review in an Five-Year Review report that:

- Selects the most appropriate protectiveness statement
- Identifies issues
- Recommends follow-up actions

EPA will either concur with the LM protectiveness determination or make an independent finding. The EPA response is to be issued in August 2022.

Patti was asked whether there was a requirement for public review or a public hearing on a draft document. She said there was not. David Abelson pointed out that this briefing was above and beyond what was required by CERCLA. It was requested of DOE, and they agreed to provide this as an opportunity for community knowledge about the process. Patti pointed out that the information looked at as part of this process is all publicly available. Shelley Stanley asked if the Five-Year Review was an appropriate place to bring up concerns about PFAS. Patti said it is an appropriate time for these types of questions, and the review will look at contaminants not looked at during the original cleanup. She said public comments are welcomed during the process. Nancy Ford asked whether the potential effects of climate change would be considered. Patti said yes, and that this was one of the key topics that will be looked at as part of question 3 that she mentioned earlier.

**Board Roundtable:** There were no updates.

**Big Picture/Additional Questions/Issue Identification:**

**February 7, 2022**

*Potential Business Items*

- Elect 2022 Officers
- Adopt Resolution re: 2022 Meeting Dates

*Potential Briefing Items*

- DOE Quarterly Update
- CERCLA Five-Year Review

**April 4, 2022**

*Potential Briefing Items*

- Rocky Flats Stewardship Council Overview
- USFWS Refuge Discussion



Issues to watch:

- Changes at SPPTS
- Stability of Original Landfill
- Uranium and plutonium reportable conditions
- Trichloroethylene (TCE) exceedances in groundwater
- North Walnut Creek slump

The meeting was adjourned at 10:35 am.

*Respectfully submitted by Erin Rogers.*