

ROCKY FLATS STEWARDSHIP COUNCIL

Monday, June 6, 2022

8:30 – 11:15 AM

Virtual Meeting via WebEx

Board members in attendance: Randy Moorman (Director, Arvada), Jacob Moyer (Alternate, Arvada), Summer Laws (Alternate, Boulder County), Tara Winer (Director, City of Boulder), Taylor Reimann (First Alternate, City of Boulder), Deven Shaff (Director, Broomfield), Anne Beierle (sitting in for Bill Fisher, Golden), Pat O’Connell (Alternate, Jefferson County), Ashley Witkovich (Director, Northglenn), Shelley Stanley (Alternate, Northglenn), Mark Lacin (Director, Superior), Jan Kulmann (Director, Thornton), Caleb Owen (Alternate, Thornton), Trea Nance (Alternate, Westminster), Jeannette Hillery (Director, League of Women Voters), Linda Porter (Alternate, League of Women Voters), Roman Kohler (Director, Rocky Flats Homesteaders), 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 (Setzer & Vander Wall, P.C)

Attendees: Andy Keim (DOE-LM), Padraic Benson (DOE-LM), Cliff Carpenter (DOE-LM), Lisa Bade (RSI Entech), Harry Bolton (DOE-LM), Dana Santi (RSI Entech), John Boylan (RSI Entech), George Squibb (RSI Entech), Jody Nelson (RSI Entech), Karin McShea (RSI Entech), Ryan Wisniewski (RSI Entech), David Lucas (USFWS), Lindsey Murl (CDPHE), Lindsey Archibald (CDPHE), Jesse Aviles (EPA), Eric Barnes (Fiscal Focus Partners), Cathy Shugarts (Westminster), Alicia Doran (Jefferson County), Rachel Brenna (Jefferson County), Laura Hubbard (Broomfield), Shirley Garcia, Lynn Segal, Joan Seeman, Giselle Herzfeld, Carl Spreng

Convene/Agenda Review: Jan Kulmann convened the meeting at 8:35 am.

Public Comment: David asked for public comment.

Giselle Herzfeld: She remains concerned about ongoing contamination. She is worried about not having virtual meetings going forward. She thinks meetings should have an online option for transparency and that recordings of meetings should be posted online. She suggested that DOE could offer extra funding to make a hybrid option possible. She is also concerned that the Stewardship Council cannot give recommendations regarding Rocky Flats. She thinks the Stewardship Council should have the authority to give advice and recommendations for Rocky Flats. She feels her comments are not addressed or considered.

Lynn Segal: Lynn said she thinks there should be a virtual option for meetings going forward. She’s concerned about the Five-Year Review and no ability for actionable input from the public or the ability to give input into process.

Joan Seeman: She is interested in CDPHE and EPA oversight of DOE. She is interested in the Five-Year Review. She would like it if the public could review a draft of the document and provide comment.

Consent Agenda: The consent agenda included approval of the minutes from the April 4, 2022, meeting and checks written since that meeting.

Kim Griffiths moved to approve consent agenda. The motion was seconded by Jeannette Hillery. The motion to accept the minutes and checks passed 13-0.

Amended Meeting Resolution: David Abelson stated that we need to change the meeting resolution that was adopted at the February meeting to reflect that the June 2022 meeting was virtual, along with February and April. This resolution will supersede the prior one.

Roman Kohler moved to approve the meeting resolution. The motion was seconded by Jeannette Hillery. The motion to accept the minutes and checks passed 13-0.

Executive Director's Report: David spoke to two items.

In-Person Meetings: David said he thought the Board meeting would be in person today, but that was changed at the last minute due to increasing COVID transmissions. Staff needs to hear what the Board wants to do going forward. Boulder County never stopped being virtual, the City of Boulder went back to virtual, and other governments are meeting in person. The staff is looking to local governments for input.

DOE Quarterly Reports: David said today is the first time we are changing the quarterly report briefing to a high-level overview (two-slide presentation). Once we wrap up the meeting, we will have a community round table discussion to focus on the details of quarterly report. David is not expecting all elected officials and staff to stay on. David will facilitate the discussion and asks for patience during this first attempt.

Stewardship Council 2021 Financial Audit: David Abelson introduced a review of the Stewardship Council's 2021 audit. He explained that the Stewardship Council is not required by either state law or the DOE grant to secure an audit. However, the Board has always operated according to a belief that an independent audit is an important check that confirms both the Board and staff are managing the finances in accordance with applicable laws and regulations.

The auditor, Eric Barnes, gave an overview of the 2021 audit. Once again, the Stewardship Council received a clean report. Eric said there was appropriate supporting documentation for expenditures and revenues. He noted that the Stewardship Council is complying with all applicable laws and regulations and did not go over budget in 2021. David mentioned that the Stewardship Council over-budgets on purpose so that we do not have to do supplemental budgeting (if the Stewardship Council was going to exceed the budget, supplemental budgeting would be required).

Eric noted that the Stewardship Council receives the majority of its funding through a DOE grant, which is set to expire on February 28, 2027.

Jeannette Hillery moved to accept the Stewardship Council 2021 Financial Audit. The motion was seconded by Deven Shaff. The motion passed 14-0.

DOE Overview of Annual Report for CY 2021

George Squibb gave an overview of the CY 2021 annual report and also encouraged people to read the report if interested.

- Surface water
 - All RFLMA Point of Compliance analyte concentrations remained below reportable condition levels throughout CY 2021.

- Reportable conditions occurred at Points of Evaluation (POEs) GS10 (uranium; see CR 2021-02) and SW027 (plutonium; CR 2021-03 will be posted when final).
- Performance monitoring locations for the Original Landfill (OLF) and Present Landfill (PLF) showed acceptable water quality for all of 2021.
- Groundwater
 - Sampled all but Evaluation wells (which are sampled on even years).
 - Results generally consistent with previous data.
 - Treatment systems met applicable requirements for VOCs and nitrate; uranium treatment is subject of project launched in early 2022, expect system upgrades in 2023-2024.
- Operations and Maintenance
 - Annual site inspection completed May 24, 2021.
 - RFLMA and weather-related inspections completed, issues addressed as needed
 - OLF: Monthly inspections, issues addressed as needed, no slumping observed.
 - PLF: Quarterly inspections, no issues noted.
 - Landfill Settlement Monument surveys: Vertical settling within design limits.
 - Site erosion controls monitored and maintained.
 - Site roads regraded and dust suppressant applied to the primary routes.
 - NWCS survey: Continued monthly monitoring of survey points.
- Ecology
 - Collected vegetation, revegetation, wetland, and wildlife monitoring data.
 - Conducted management activities: revegetation, weed management.
 - Mitigation areas either continue to meet, or progress toward meeting, success criteria.

For additional details on any items noted here, please view the Rocky Flats 2021 annual report at https://lmpublicsearch.lm.doe.gov/lmsites/s38162_rfs_cy21.pdf.

David Abelson asked for questions now in advance of round table. Randy Moorman asked what a reportable condition is and what action is triggered. George Squibb replied that reportable conditions are defined in the Rocky Flats Legacy Management Agreement (RFLMA), which outlines the various post-closure requirements for Rocky Flats. Attachment 2 of the RFLMA contains the monitoring and surveillance requirements. Reportable conditions are triggered if specific measurements are exceeded. When you have a reportable condition, consultation between the three RFLMA parties (DOE, EPA, and CDPHE) is triggered. The parties look at the available data and try to understand what may have caused the reportable condition (e.g., flow conditions), assess whether the risk to the public has changed, and discuss an appropriate path forward to mitigate risk if required. Risk mitigation is not always required. Contact records describe this consultation process and results.

George said reportable conditions at Points of Compliance (POCs) are not common; they are more common at POEs. The path forward for GS10 has been determined and is being finalized for SW027. For SW027, erosion controls were added in the SW027 drainage. DOE is waiting for the contact record to determine the final actions.

Randy Moorman asked about air monitoring. George said air monitoring had not been conducted since 2007. David Abelson discussed air quality monitoring. He has heard from elected officials and community members that consistent air quality monitoring will help them address constituents' questions regarding air quality in the event of a fire. David had consistently heard that establishment of

an air quality baseline is important. The Stewardship Council is not allowed to lobby, advise, or advocate, but we can forward concerns as governments, non-governmental parties, and the public. David said he has seen a growing consensus amongst Board members regarding the value of establishing a baseline air quality with regular monitoring. He thinks there is more to discuss. He encouraged the Board to put ideas regarding air quality monitoring in writing and send them to DOE, CDPHE, and EPA.

Jeanette replied that she had consistently asked for air quality monitoring, which will help surrounding communities feel better. She wants the DOE to move forward with inclusion of air quality monitoring in regular reporting.

Meeting with CDPHE

Lindsay Murl gave an overview of CDPHE's role with Rocky Flats. CDPHE is the lead RCRA regulator.

Lindsay gave a brief timeline of Rocky Flats (1951 to 2007).

- Plutonium production from 1950s to the 1980s
- EPA/FBI raid in 1989
- Added to National Priorities List (NPL) of CERCLA (Superfund sites) in 1989
- In 1992, weapons production mission ended
- In 1996, the Rocky Flats Cleanup Agreement was signed
- In 2006, the Corrective Action Decision/Record of Decision (CAD/ROD) was finalized
 - Peripheral Operable Unit (POU) – no action, unlimited used and unrestricted exposure
 - Central Operable Unit (COU) – selected remedy is monitoring and maintenance, institutional controls, and signs
 - POU and offsite areas delisted from EPA's NPL (no restrictions in POU)
- Also in 2006, Rocky Flats Legacy Management agreement (RFLMA) signed
- In 2007, POU lands transferred to USFWS, Rocky Flats National Wildlife Refuge established.

Lindsay gave an overview of the exposure scenarios assessed in estimating risk for future users.

She described ongoing monitoring and site controls:

- Three groundwater treatment systems
 - Solar Ponds Plume Treatment System
 - Mound Site Plume Treatment System/East Trenches Plume Treatment System
 - Present Landfill Treatment System
- Groundwater and surface water monitoring sampling
- Per the CAD/ROD, air quality monitoring is no longer required
- Ecological monitoring
- Quarterly and annual reporting
- OLF and PLF inspections
- O&M activities
- Signs and institutional control monitoring
- Consultation with three RFLMA parties
- Community involvement

Lindsay gave an overview of available public health studies.

- 1990 to 1999 – Historical Public Exposure Studies for releases from 1952 to 1989 and estimated risk/dose

- 2003 – CDPHE Rocky Flats Production Worker Study
- 2005 – ATSDR Public Health Assessment
- CDPHE’s Colorado Cancer Registry, cancer incidence analyses
 - 1998 – original study (10 types of cancers tied to Pu and other contaminants)
 - 2016 – follow up to original study with 25+ years of data
 - 2017 – rare cancers and thyroid cancer supplement to study
 - 2019 – breast cancers in young women memo

Lindsay indicated these studies showed no pattern of elevated cancer found near Rocky Flats.

Lindsay said current topics of interest for CDPHE are:

- CERCLA Five-Year Review
- PFAS – emerging contaminants
- Climate change
- Grassfires
- SW027 response

Randy Moorman asked about the Five-Year Review and if that was the same Five-Year Review that was discussed in public comment. Lindsay said it was the same document. The Five-Year Review applies to the Central Operable Unit (COU), the lands DOE manages, not the Peripheral Operable Unit, the lands that comprise the Refuge. Every five years, DOE conducts a Five-Year Review to assess whether the remedy is still protective of human health and environment. Lindsay said the Five-Year Review is public record.

Kim Griffiths asked about plant uptake of contaminants and risk of exposure in the event of a fire. Lindsay said her understanding was that plutonium was not very soluble at Rocky Flats, so plant uptake was not a big exposure pathway. Jeannette Hillery said she recalled a report about plant uptake and possible release from fire. Lindsay agreed to look for more information.

Deven Shaff said he is hoping to get a copy of presentation so he can access the links. He also indicated that Broomfield is glad to see there is more discussion about other solvents and chemicals used on the site (in addition to plutonium) and possible risk from those chemicals.

Lindsay that the Five-Year Review and quarterly and annual reports are good places to look for monitoring results of other compounds, like volatile organic compounds (VOCs).

Jesse Aviles discussed the Five-Year Review process at Rocky Flats. He said the Stewardship Council does not get a draft copy of the Five-Year Review for review and comments. DOE writes the report, and EPA either concurs or does not concur with DOE’s evaluation. When the final Five-Year Review is released in August, the public can see EPA’s comments and DOE’s responses. Lindsay said that CDPHE consults on the Five-Year Review process but does not have jurisdiction over the report. David Abelson said the Stewardship County is not a party to the Five-Year Review process.

Giselle commented that she put a link in the Webex chat with a paper on plutonium uptake in plants. She wonders why the POU is not subject to Five-Year Review given the likelihood that contaminants from the COU migrate to the POU. Lindsay said that contaminants leave Rocky Flats via surface water

(groundwater discharges to surface water before leaving the site). That is why we have POCs, POEs, and sentinel groundwater wells.

Board Roundtable

Randy Moorman said he encourages a hybrid format, which the City of Arvada has been doing. David Abelson replied that the Stewardship Council does not have the infrastructure that a municipality has. To capture 15+ Board members on video can be extremely difficult. The executive committee has discussed the issue but does not have a good solution. None of governments have capacity to host such a big meeting.

Summer Laws asked if the Stewardship Council could meet at Rocky Mountain Metropolitan Airport and use their owl technology. Deven replied that it takes someone to manage video and sound for such a meeting, and he is not sure if we have someone who can do that. Summer said she would forward information to David to discuss with the executive committee.

Big Picture/Additional Questions/Issue Identification: David mentioned that new members interviews are coming up in October 2022. The Cold War Museum's seat and Kim Griffiths' seat are up for election.

September 19, 2022

Potential Business Items

- Initial review of the 2023 work plan
- Initial review of the 2023 budget

Potential Briefing Items

- DOE Quarterly Update
- Update on Multi-Purpose Facility

October 31

Potential Business Items

- Adopt 2023 work plan
- Adopt 2023 budget
- New Member Interviews

Potential Briefing Items

- DOE Quarterly Update

Roundtable Discussion of DOE's 2021 Annual Report

Shelley Stanley asked about elk possibly causing slumping near the PLF. Karin McShea said the elk have not caused problems on the PLF.

Trea asked if measures have been taken to correct the SW027 issues. George said they were applying wood straw to the ground near SW027 as an erosion control measure. He also said one of the items holding up the contact record is the area that will require application of wood straw to control erosion. They are continuing to work on that issue.

Shelley asked how they know wood straw will work. George said wood straw is used for maintenance, not as a permanent fix; that is why they have monitoring.

Shelley asked if any changes were noted in 2021 to the amount of water running offsite as compared to prior years as a result of climate change. George said that water levels are highly variable in this area, and it is hard to tease out climate change impacts specifically.

Laura Hubbard asked about the best management practice (BMP) of inspecting the surface and looking for depressions. She wondered at what point erosion or land surface changes require action as part of BMPs. Harry Bolton said that BMPs are implemented to take care of an issue before it meets the trigger point to prevent it from meeting that trigger point. BMPs are not in lieu of mandated actions.

Trea asked about the two different approaches toward handling non-detects (NDs) in sampling. John Boylan replied that they will continue to use two approaches in treatment of NDs unless they get some indication of one being better than the other. NDs are discussed in the annual report. He said there is no perfect way to deal with NDs in a long-term statistical evaluation.

Board meeting was adjourned at 11:15 am.