

ROCKY FLATS STEWARDSHIP COUNCIL

Monday, February 7, 2022

8:30 – 10:35 AM

Virtual Meeting via WebEx

Board members in attendance: Randy Moorman (Director, Arvada), Jacob Moyer (Alternate, Arvada), Claire Levy (Director, Boulder County), Tara Winer (Director, City of Boulder), Taylor Reiman (Alternate, City of Boulder), Marni Ratzel (Alternate, City of Boulder), Deven Shaff (Director, Broomfield), Jennifer Hoffman (Alternate, Broomfield), Bill Fisher (Director, Golden), Pat O’Connell (Alternate, Jefferson County), Ashley Witkovich (Director, Northglenn), Shelley Stanley (Alternate, Northglenn), Jan Kulmann (Director, Thornton), Martin Kimmes (Alternate, Thornton), Rich Seymour (Director, Westminster), Bruce Baker (Alternate, Westminster), 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), Nicole Lachance (RSI Entech), Dana Santi (RSI Entech), John Boylan (RSI Entech), George Squibb (RSI Entech), Harry Bolton (RSI Entech), Chris Stewart (RSI Entech), Karin McShea (RSI Entech), Jody Nelson (RSI Entech), John Homer (RSI Entech), Kirk Briscoe (RSI Entech), Ryan Wisniewski (RSI Entech), Faith Anderson (RSI Entech), David Lucas (USFWS), Lindsey Murl (CDPHE), Lindsey Archibald (CDPHE), Jesse Aviles (EPA), Cathy Shugarts (Westminster), Emily Hunt (Thornton), Laura Hubbard (Broomfield), Nancy Ford, Shirley Garcia, Lynn Segal, Jon Aguilar (Denver Post)

Convene/Agenda Review: Jan Kulmann convened the meeting at 8:30 am.

Public Comment

Lynn Segal: Lynn says she thinks FACA guidelines should be used to allow the public to be represented accurately with additional time and responses. She said her mother died after inhaling plutonium from Rocky Flats and she wants to make sure no one is allowed to go onsite. She pointed to recent high winds and the recent fire nearby as posing additional risks.

Joan Seeman: Joan signed up for public comment but did not participate in the meeting.

Elect Stewardship Council Officers for 2022: The Board voted to approve the following for 2022 officers:

- Jan Kulmann, Chair
- Deven Shaff, Vice Chair
- Jeannette Hillery, Secretary/Treasurer

Roman Kohler moved to approve the slate of officers. The motion was seconded by Kim Griffiths. The motion passed 13-0.

2022 Meeting Schedule and Notice Provisions: Each year, the Board adopts a resolution establishing the meeting dates for the year. The 2022 meeting dates are February 7, April 4, June 6, September 12, and October 31. The Board will continue to meet virtually through at least the April meeting.

Roman Kohler moved to approve the 2022 Meeting Schedule and Notice Provisions. The motion was seconded by Claire Levy. The motion passed 13-0.

Consent Agenda: The consent agenda included approval of the minutes from the September 13, 2021, and November 1, 2021, meetings, and checks written since the November 1, 2021, meeting. Roman Kohler noted that Murph Widdowfield is with the Rocky Flats Cold War Museum, correcting the draft minutes.

Roman Kohler moved to approve consent agenda. The motion was seconded by Claire Levy. The motion to accept the minutes and checks passed 13-0.

Executive Director's Report: David Abelson reported on new Board members from member governments

- Hon. Randy Moorman (Arvada, Director)
- Jacob Moyer (Arvada, Alternate)
- Hon. Tara Winer (City of Boulder, Director)
- Marni Ratzel (City of Boulder, Second Alternate)
- Jennifer Hoffman (Broomfield, Alternate)
- Hon. Ashley Witkovich (Northglenn, Director)
- Brett Henry (Thornton, Alternate)
- Hon. Bruce Baker (Westminster, First Alternate)

David continued by noting one year ago we had four new board members, including three new elected officials, and as we move further away from the end of cleanup there is an ongoing loss of institutional knowledge. In the coming months David wants to hear from the Board, to help ensure that members understand fundamentals of the Rocky Flats cleanup and ongoing management. He continued by noting that it is also important for the Board to reach out to Melissa Weakley and David as there are a lot of misinformation out there about the cleanup, ongoing management, including inaccurate information about the Stewardship Council.

David next raised the CERCLA Five-Year Review. That review is focused on determining whether the remedy remains protective and whether there is any new information that would require the agencies to revisit or otherwise change the remedy. A few of the member governments and community members submitted comments – their intent is that the agencies will consider the issues raised therein as part of the Five-Year Review.

David concluded by noting the 2021 audit has started. It will be presented at the June 6, 2022, meeting.

Wildfire at Rocky Flats: DOE-USFWS Discussion of How the Agencies Would Respond: DOE and USFWS were asked to provide an overview of planned agency responses to wildfires at Rocky Flats. David Lucas is the Project Leader for the Colorado Front Range National Wildlife Refuge Complex. He began by explain some basics about fires. He introduced the fire triangle of oxygen, heat and fuel, the three things

that are necessary for fire. He noted that fuel is most important when considering wildfires. He added that wildfires are also strongly impacted by weather and topography. He commented that the conditions of the Marshall Fire meant that there was no way to stop it and that the responders did an excellent job of protecting public health and safety through their evacuation efforts. He also noted the difference between urban/structural firefighters and wildland firefighters and how they need to work together in situations like the Marshall Fire.

USFWS has master agreements each state, which lay out how they will manage fires on wildlands. In Colorado, the agency involved is the Division of Fire Control and Prevention (DFCP). Each year, USFWS also develops annual Operating Plans on the county level.

Early in the Marshall Fire, USFWS dispatched officers to observe the fire to see whether it may affect Rocky Flats. Notification was made early on to the public that Rocky Flats was not impacted by the fire. Fire engines were dispatched from the Rocky Mountain Arsenal, since they are not staged at Rocky Flats during the winter. David Lucas noted that this policy would be reviewed moving forward. In the afternoon, he declared the fire a threat to the Rocky Flats National Wildlife Refuge, which activated federal fighting activities to assist local agencies. USFWS was also in touch with DOE throughout the day.

David went on to note that wildfires are not uncommon at Rocky Flats, and that there is typically about one each year. How they are suppressed depends on conditions. Fire management begins with local first responders and builds up from there to the appropriate response necessary. The fuel type is primarily grasses, and this type of fire is affected greatly by winds and humidity. Because of this, generally Rocky Flats fires are of short duration. There is some additional fuel in the drainage areas, such as cottonwood trees.

After the Marshall Fire, there have been discussions around protecting the Candelas neighborhood south of Rocky Flats. Stemming from these discussions, USFWS will be reducing fuel onsite through mowing the southern boundary of the site twice a year instead of once a year. They are also working toward positioning a fire engine onsite, which will require electricity to heat the storage area. There will also be a town meeting and joint training operations with local officials. The Fire Management Plan calls for any fires along the Front Range to be suppressed as soon as possible.

David Lucas recommended that local governments work closely with their residents on evacuation plans and work on fire prevention as well.

Andy Keim, DOE's Site Manager for Rocky Flats, noted that DOE is not equipped to fight fires. They will report any fires to local officials and stay out of the way. Mountain View Fire District has responsibility for responding to any fires within the Central Operable Unit (COU), which is the portion of Rocky Flats still managed by DOE. The expected response time is about 20 minutes under normal conditions. DOE has a wildland fire management program to protect worker and public safety, and to focus on fire prevention. Various policies are in place onsite that address fire prevention during work onsite. DOE and its contractor also employ various fuel reduction strategies. Following any fire, DOE conducts assessments of potential impacts to any of the existing treatment and protection systems onsite. Impacts to water quality and ecology are also evaluated.

Andy noted that Rocky Flats does not present any special hazards related to fires. The remaining infrastructure (building slabs and basements) and subsurface soils with residual radiological

contamination are buried beneath at least three feet of clean soil. This soil acts as a physical barrier. There are also no flammable mineral deposits such as coal seams that would present a risk of underground ignition. Remaining surface contamination was considered as part of a wildfire scenario the during cleanup risk assessment and was found to pose negligible risk to the public or firefighters.

Claire Levy noted that it is important for the public to have confidence about the effects of potential fires. She added that residents surrounding the Marshall Fire were strongly interested in air monitoring following that fire. She asked if there would be air monitoring following any fire at Rocky Flats. She stated that while modeling shows one scenario, real data would be important to verify that the models were correct. Andy Keim replied there is nothing in existing plans that would call for provision of air monitoring following a fire onsite. He said that air monitoring was conducted during previous fires and did not show any movement of radioactive materials. Claire requested that this be looked at again.

Jeannette Hillery said that she has been asking for air monitoring for years and that it would serve to assure the public regardless of whether the agencies see a clear need for it. She asked whether the fire management plans mentioned in this discussion were available to the public and how often they are reviewed. Andy noted that the DOE fire plans are internal worker safety policies, so are not available publicly. DOE meets periodically with local fire districts, and they are currently working on a new MOU with Mountain View Fire District. David Lucas said that the USFWS Fire Management Plan is available online (as well as the overarching site Comprehensive Conservation Plan) and is updated annually (although minor annual updates might not be posted). He said he was not sure whether the annual operating plans with the state and county fire protection agencies were available online, but he could share copies.

Deven Shaff asked whether Mountain View Fire District only responded to fires in the COU or also in other areas onsite. David Lucas said that Coal Creek Fire Protection is responsible for Section 16 in the southwest corner, but the remainder is Mountain View. Deven asked given the speed of the spread of the Marshall Fire, there were plans to look at reducing the 20-minute response time. Andy Keim did not know if there was any way to reduce that time. David Lucas said that he did not believe that 20 minutes was an unreasonable timeframe for response. Deven also referred to Claire Levy's request about air monitoring and suggested it would make a good follow-up discussion and could also include CDPHE. David Lucas agreed that this was an important point and needed to be part of the discussion. David Abelson commented that the Executive Committee would consider how best to ensure that members of the Stewardship Council have the information they need to respond to questions from their constituents related to any future events.

Trea Nance asked what plans were in place regarding communication with local governments during fire events at Rocky Flats. David Lucas noted that the plans were adaptive, but there was not a robust communications arm in place and most communications were set up to take place through the Jefferson County's Sheriff's office consolidated dispatch system. He added that a communications group is currently looking into this question. He is also open to input from the local governments on this point. In terms of any radiological risks, David Lucas said it was the position of USFWS that they are not the subject matter experts and would defer to EPA, CDPHE and DOE to provide this type of information to the local governments or broader public. Randy Moorman echoed the previous comments about the importance of post-fire air monitoring and urged DOE to consider adding this as a component of fire response.

Kim Griffiths noted that Arvada is building a new fire station in Candelas. She asked whether this station might have an active role in firefighting on the Refuge. David Lucas said they will absolutely have a role. He said planning has changed due to the recent construction of nearly 700 homes in Candelas.

Trea Nance asked Andy Keim whether DOE had a communication plan in the event of a fire, or even a way for local governments to reach out to get information during a fire. Andy agreed that this is important information for the communities to have. Andy said he could share a summary of what actions they would take. He said information would be provided via the LM-DOE website and he would investigate whether there was a number to call for further information. He added that DOE would likely not be providing information in real-time. He will dig deeper into this question and get back to the Stewardship Council.

Host DOE Quarterly Meeting: DOE was on hand to brief regarding on the third 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.

At the Original Landfill (OLF) Location GS59, routine surface water sampling in Woman Creek downstream of the OLF, showed mean concentrations for volatile organic compounds and mercury below applicable RFLMA water quality standards. The composite sample started on July 13, 2021, was collected from the field on January 4, 2022. George reported that the results came in after the report was written but were below standards.

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

No RFLMA Point of Evaluation (POE) or Point of Compliance (POC) analyte concentrations were reportable during the third quarter of 2021.

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 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 third quarter, 10 RCRA wells sampled at the OLF and PLF. Results were generally consistent with previous data. Data will be evaluated as part of the 2021 annual report.

Several activities were undertaken to maintain the treatment systems onsite. Routine maintenance was performed at the Mound Site Plume Collection System (MSPCS), East Trenches Plume Treatment System (ETPTS), Solar Ponds Plume Treatment System (SPPTS), and Present Landfill Treatment System (PLFTS). Annual solar/battery power inspections were completed at MSPCS, ETPTS, and SPPTS.

ETPTS received additional maintenance:

- Installed additional insulation and heaters in battery boxes
- Replaced damaged solar panel
- Effluent line clogged with hard water scale in September
 - Full replacement was already scheduled for early 2022
 - Planned temporary replacement of clogged portion for October 2021 until larger job could be completed as scheduled
- Water treatment continued throughout these activities

There was also continued evaluation of groundwater conditions west of the existing SPPTS collection trench.

Shelley Stanley asked how the pipe at the ETPTS was removed and how much soil was removed. John said it was excavated under an emergency contact record in consultation with the regulators. He said it was very shallow. She also asked how many linear feet will be involved in the replacement of the pipe. John said it was probably about 40 feet. A different contact record is in place for the upcoming work.

Site Operations – Harry Bolton

Harry noted that quarterly sign inspections are a physical control under the RFLMA agreement. Signs were inspected on August 24 and all were found to be in good condition and legible.

At the OLF, monthly inspections were performed July 29, August 25, and September 29. Excess sediment was found along the East Perimeter Channel GeoRidges and the East Subsurface Drain outfall in July and August. A weather-related inspection was performed July 2. Excess sediment was found along the East

Perimeter Channel GeoRidges. Also, maintenance at the OLF was performed in July and August. The excess sediment found along the East Perimeter Channel GeoRidges, and the East Subsurface Drain outfall was moved to well vegetated areas with hand tools. Two rows of GeoRidges were also added to the East Perimeter Channel.

Settlement monuments at the PLF were surveyed on September 7. Vertical settling was within design limits. Areas of stabilization activities remain stable and in good condition. At the PLF, the quarterly inspection was performed on August 23 and an additional weather-related inspection was performed on July 2. The Present Landfill was found to be in good condition.

A quarterly inspection of Former Building Areas 371, 771, 881, and 991 was completed in combination with a weather-related inspection on July 6. No new erosion, subsidence, or anomalies were observed.

At the North Walnut Creek Slump, data continued to be collected from inclinometers and piezometers. Slump monitoring points were surveyed on July 1, August 2, and September 7. Vertical and lateral hillside movement were both approximately 0.70 feet on average. Total vertical movement since baseline (September 5, 2017) was approximately 4.5 feet.

Ecology – Karin McShea

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

- Preble’s mouse mitigation monitoring
- Wetland monitoring
- Revegetation monitoring
- Forb nursery monitoring
- Habitat enhancement planting survival counts
- Land management activities
- Photo point monitoring
- Spot herbicide applications
- Wetland/vegetation/weed mapping
- Prairie dog town surveys

Claire Levy noted that cheatgrass was extremely flammable and asked what plans were to control it at Rocky Flats. Karin noted that they do not have a large population of this type of grass onsite, but they do keep an eye on it. Shelley asked whether there were any plans for culling the elk herd. Karin said they will be discussing the carrying capacity of elk onsite with USFWS in the next couple of years.

Board Roundtable: Barb Vander Wall announced that all new Board members will be receiving Oaths of Office to sign.

Big Picture/Additional Questions/Issue Identification:

April 4, 2022

Potential Briefing Items

- Rocky Flats Stewardship Council Overview
- USFWS Refuge Discussion

June 6, 2022

Potential Business Items

- Accept 2021 Financial Audit

Potential Briefing Items

- DOE Quarterly Update

The meeting was adjourned at 10:35 am.

Respectfully submitted by Erin Rogers.