# ROCKY FLATS STEWARDSHIP COUNCIL Monday, September 14th, 2020, 8:30 – 10:15 AM Virtual Meeting via WebEx

Board members in attendance: Nancy Ford (Arvada), Sandra McDonald (Alternate, Arvada), Matt Jones (Director, Boulder County), Summer Laws (Alternate, Boulder County), Sam Weaver (Director, City of Boulder), Heidi Henkel (Alternate, Broomfield), David Allen (Alternate, Broomfield), Jim Dale (Director, Golden), Libby Szabo (Director, Jefferson County), Pat O'Connell (Alternate, Jefferson County), Joyce Downing (Director, Northglenn), Shelley Stanley (Alternate, Northglenn), Mark Lacis (Director, Superior), Ken Lish (Alternate, Superior), Jan Kulmann (Director, Thornton), James Boswell (Alternate, Thornton), Kathryn Skulley (Director, Westminster), Rich Seymour (Alternate, Westminster), Lindie Aragon (Alternate, Westminster), Jeannette Hillery (Director, League of Women Voters), Linda Porter (Alternate, League of Women Voters), Roman Kohler (Rocky Flats Homesteaders), 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: Carmelo Melendez (DOE-LM), Scott Surovchak (DOE-LM), Andy Keim (DOE-LM), Gwen Hooten (DOE-LM), Nicole Lachance (Navarro), Chris Stewart (Navarro), Dana Santi (Navarro), John Boylan (Navarro), George Squibb (Navarro), Padraic Benson (Navarro), Harry Bolton (Navarro), Ryan Wisniewski (Navarro), Jesse Aviles (EPA), Lindsey Archibald (CDPHE), Lindsey Masters (CDPHE), Cathy Shugarts (Westminster), Laura Hubbard (Broomfield), Trea Nance (Westminster), Bill Ray (JHPPA), Lynn Segal (citizen)

## **Convene/Agenda Review**

Joyce Downing convened the meeting at 8:30 am.

#### **Public Comment**

Prior to the meeting, Lynn Segal requested to speak during the public comment period. Joyce recognized her at this time. Lynn said she wanted to share her mother's obituary, and described events related to the fire at Rocky Flats in 1957 and her mother's illness. She said she could not prove that her mother died from effects of this fire, but that she did not believe anyone should set foot on the Rocky Flats National Wildlife Refuge for 24,000 years.

#### **Consent Agenda**

The consent agenda included approval of the minutes from the June meeting and the checks written since the last meeting.

<u>Jeannette Hillery moved to approve the June Board minutes as amended and the checks. The motion was seconded by Mark Lacis. The motion to accept the minutes and checks passed 12-0.</u>

### **Executive Director's Report**

David Abelson spoke to the Board about a few issues. David noted that applications were currently being taken for two community seats on the RFSC that expire this year (Rocky Flats Cold War Museum and Kim Griffiths seats). Applications are due October 1, and the local government representatives on the Stewardship Council will be conducting interviews and making appointments at the October 26 meeting.

David next briefed on the upcoming triennial review of the Intergovernmental Agreement. Every three years, all local governments who hold seats on the RFSC are asked to either opt-out of their role on the Board or express their interest in continuing their participation for the next three-year period by passing a resolution to this effect. These resolutions should be approved no later than mid-January 2021.

### **Host DOE Quarterly Meeting**

DOE was on hand to brief the Board regarding site activities for the first quarter of 2020 (January—March). The full report was posted on <a href="https://www.lm.doe.gov/Rocky\_Flats/Documents.aspx">https://www.lm.doe.gov/Rocky\_Flats/Documents.aspx</a> Activities included surface water monitoring, groundwater monitoring, ecological monitoring, and site operations (inspections, maintenance, etc.).

The Rocky Flats Site remedy components include:

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

# Surface Water Monitoring – George Squibb

George described some changes implemented during the pandemic but noted that operations were not significantly affected. The site refers to these changes as 'COVID-19 Minimum Safe Operations':

- The Office of Legacy Management maximized telework on March 16
- Minimum Safe protocols began March 26, reducing some field operations
- All surface water and groundwater monitoring took place as required by RFMLA
- Groundwater treatment systems functioned as normal
- The Original Landfill maintenance project continued as scheduled following Centers for Disease Control and Prevention (CDC) guidelines

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

Routine surface water sampling in Woman Creek at monitoring station GS59, downstream of the Original Landfill (OLF), showed mean concentrations for all analytes below applicable RFLMA water quality standards.

At the Present Landfill Treatment System (PLFTS) effluent monitoring station,

• The arsenic concentration was 29  $\mu$ g/L, exceeding the standard of 10  $\mu$ g/L. Sampling frequency was increased to monthly. For the subsequent monthly sample, the arsenic concentration was

- $4.8~\mu g/L$ , below the 10  $\mu g/L$  standard. After the subsequent monthly sample was evaluated, sampling frequency returned to quarterly
- Quarterly concentrations for all other analytes were below applicable RFLMA standards

Nancy Ford asked George whether there were patterns that allow the site to be able to explain what could be causing various exceedances. George said it depended on the circumstance. These events trigger a consultation between CDPHE, EPA and DOE. Based on over 25 years of data, many of the situations are well-understood and a lot of background data is available to use as decisions are made on how to proceed. It also depends on how far above a standard the reading is. Sometimes the parties decide additional monitoring is needed, and sometimes they may decide that certain mitigation work is necessary.

George said that no Point of Evaluation (POE) or Point of Compliance (POC) analyte concentrations were reportable during the first quarter of 2020.

# 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 first quarter of 2020, 10 RCRA wells were sampled at the PLF and OLF. Results were generally consistent with previous data and will be evaluated as part of the 2020 annual report.

Routine maintenance was conducted at all treatment systems:

- East Trenches Plume Treatment System (ETPTS)
- Mound Site Plume Collection System (MSPCS)
- Solar Ponds Plume Treatment System (SPPTS)
- PLFTS

## At the SPPTS:

- Treated water was not discharged for part of January and February
- Pause in discharge led to water freezing in the effluent line
- Flow was restored after the line was cleared
- In the interim, treated water was held within the "Big Box" (treatment lagoon)

Site Operations – John Boylan

John explained that an Annual Site Inspection is conducted each year to monitor for evidence of significant erosion and any violations of institutional controls. He said that the CY 2020 Annual Inspection was postponed due to restrictions under the DOE coronavirus Minimum Safe operational status. The site team verified that the restrictive notice for the COU remains in the Administrative Record and on file with Jefferson County.

RFLMA physical controls were also verified. Signs were inspected in March and all were found to be in good condition and legible. Some DOE stickers were replaced due to weathering.

Monthly and weather-related inspections were conducted at the OLF:

- 5-foot-long and 3-inch-deep tension cracks were observed above berm 4 in January
  - Addressed by the subcontractor
  - o Seep 2/3 excavated and Seep 8C partially covered during maintenance activities
- Surveyed settlement monuments on March 2, 2020
  - Vertical settling was within design limits
- Mobilization and site preparation for slope stabilization project in September
- Drilling progress in February was slowed by multiple snow events and periods with high winds
- By the end of the quarter, 212 of 267 tie-back anchors were installed, tested, and locked off
- East and West Interceptor Trenches neared completion. East Subsurface Drain continues to function as designed
- Seep 10 siphon and temporary groundwater intercept system offline during the first quarter
  - Maintenance activity in the area to render these systems obsolete

A quarterly inspection was conducted in March at the PLF. The landfill was found to be in good condition. Some minor maintenance was performed at the PLFTS outlet.

The scheduled first quarter inspection of Former Building Areas 371, 771, 881, and 991 was postponed due to restrictions under the coronavirus Minimum Safe operational status.

John next spoke about the North Walnut Creek Slump.

- Continued data collection from piezometers where possible
  - o RFMLA monitoring points in this area are not impacted
- Slump monitoring points were surveyed on January 7, February 6, and March 2, 2020
  - Maximum movement since baseline (September 5, 2017) was approximately 2 1/2 feet vertically
  - Scarp crack largely remained closed due to elk traffic in the area; open 1/4 to 1/2 inch in places
  - o Small cracking continued in the Interceptor Trench System Sump access road

Nancy Ford asked what causes the cracking. John said the geology includes very thick, but weak claystone that does not transmit water very well, and loose granular alluvium above it which does. On hillsides, if the claystone is saturated and the overlaying alluvium gets too heavy, the clay layer may give out and form slumps. The potential for movement is minimized when the clay is dry.

David Abelson asked about the lifespan of the anchors. Harry Bolton noted he was not sure of the specific design life and believed they were meant to be permanent. Nancy Ford brought up a recent

article in the Denver Post related to climate change. She asked whether the site was anticipating effects of climate change on current mitigation efforts. John said RFLMA protocols will dictate necessary response to any changes. Also, DOE-LM does have a program looking at long-term climate change issues. Nancy asked whether they are anticipating any major effects. John said he was not involved in those discussions. David Abelson said that the RFSC brought up these questions several years ago. Some of the specific examples discussed were the effect of vegetation changes on land species, as well as high and low water events. He suggested that this was a topic that the Board could discuss further in 2021.

Finally, John updated on site roads. No maintenance was conducted during the first quarter. Maintenance of site roads is being planned for October 2020

### 2020 Work Plan - Initial Review

The Board began its review and edit the draft 2020 Work Plan. David noted that there were no significant changes from past years. Formal approval of the work plan is scheduled to take place at the October 26<sup>th</sup> meeting. There was a slight change to the language regarding mineral rights, based on upcoming congressional changes. David explained that plans for topics to be addressed at meetings are based on the discussion of the 'Big Picture' at the end of each meeting. He asked if board members agreed with the previous conversation recommending discussion of climate change implications in 2021. There was agreement, so David will add a provision to the work plan. No other changes were provided.

## 2020 Budget - Initial Review

The Board began its review of the draft 2020 budget. The budget hearing and adoption of the 2020 budget will take place at the October 26th meeting. David explained that the Stewardship Council's budget was relatively flat as compared to prior years. Expenditures were down a bit during 2020 due to reduced travel and conference attendance. Also, to address loss of tax revenue by local governments, local government contributions are being suspended for 2021. No changes were provided by Board members.

#### **Board Roundtable**

No updates were provided.

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

## October 26, 2020

Potential Business Items

- Adopt 2020 Work Plan
- Adopt 2020 Budget
- New member Interviews/Appointments

# Potential Briefing Items

DOE Quarterly Update

#### February 1, 2021

Potential Business Items

Elect 2021 Officers

Adopt Resolution re: 2021 Meeting Dates

### Potential Briefing Items

DOE Quarterly Update

Sandra McDonald asked whether CDPHE would be giving a presentation on potential radiation doses from the Jefferson Parkway. David said CDPHE did provide a public briefing on this, which was attended by many of the local governments. The Executive Committee decided this presentation did not need to be repeated at the Stewardship Council meeting pending any strong expression of interest from board members. Nancy Ford said she listened to that briefing but had several questions that were not answered. She said she thought it would be worth discussing many of the assumptions in the report with those who wrote the report. David said that he would connect Nancy with the appropriate people at CDPHE who can answer her questions. He also said that one thing he found to be quite notable from the report was that the researchers found, even if one were to assume that the entire parkway construction area was contaminated to the level of the one high sampling sample, that the resulting dose would be lower than that allowed for unrestricted use of the site. Nancy said she still questioned things such as the methods, models and measurements used, and would like to see a better explanation of these things. She would also like to see the names and backgrounds of the specific authors.

#### Issues to watch:

- Uranium exceedances in surface water
- Trichloroethylene (TCE) exceedances in groundwater

The meeting was adjourned at 10:15 am.

Respectfully submitted by Erin Rogers.