ROCKY FLATS STEWARDSHIP COUNCIL

Monday, September 10, 2012, 8:30 AM – 11:30 AM Rocky Mountain Metropolitan Airport, Terminal Building, Mount Evans Room 11755 Airport Way, Broomfield, Colorado

Board members in attendance: Shelley Cook (Director, Arvada), Jim McCarthy (Alternate, Arvada), Tim Plass (Alternate, City of Boulder), Carl Castillo (Alternate, Boulder), Deb Gardner (Director, Boulder County), Megan Davis (Alternate, Boulder County), Greg Stokes (Director, Broomfield), Mike Shelton (Alternate, Broomfield), David Allen (Alternate, Broomfield), Bill Fisher (Director, Golden), Joyce Downing (Director, Northglenn), Shelley Stanley (Alternate, Northglenn), Emily Hunt (Thornton), Chris Hansen (Alternate, Superior), Bob Briggs (Director, Westminster), Shirley Garcia (Director, Rocky Flats Cold War Museum), Ann Lockhart (Alternate, Rocky Flats Cold War Museum), Roman Kohler (Director, Rocky Flats Homesteaders), Arthur Widdowfield (citizen).

Stewardship Council staff members and consultants in attendance: David Abelson (Executive Director), Barb Vander Wall (Seter & Vander Wall, P.C), Erin Rogers (consultant).

Attendees: Cathy Shugarts (City of Westminster), Stuart Feinhor (U.S. Rep. Polis), Joe Cafferty (U.S. Rep. Polis), Vera Moritz (EPA), John Dalton (EPA), Carl Spreng (CDPHE), Charles Adams (CDPHE), Scott Surovchak (DOE-LM), Bob Darr (Stoller), Rick DiSalvo (Stoller), John Boylan (Stoller), Jody Nelson (Stoller), George Squibb (Stoller).

Convene/Agenda Review

Vice Chair Bob Briggs convened the meeting at 8:34 a.m. He asked if there were any suggested changes to the agenda and there were not.

Chairman's Review of August 7 Executive Committee meeting

Bob Briggs noted that an Executive Committee meeting was held on August 7, 2012. Meeting attendees included Executive Committee members (Bob Briggs, Lisa Morzel and Jeannette Hillery) and David Abelson. The purpose was to develop the agenda for this meeting. These meetings are always open to public, and have been held at the Boulder Municipal Building.

Consent Agenda

Chris Hansen moved to approve the June Board meeting minutes and the checks. The motion was seconded by Joyce Downing. The motion to accept the minutes and checks passed 12-0.

Executive Director's Report

David Abelson first updated the group on issues related to health benefits for former workers. The Board had previously discussed sending a letter supporting the Charlie Wolf Act; however the bill was not reintroduced this year. David said he had spoken with the Executive Committee and Roman Kohler, and developed a plan to address this topic at the February meeting. They will

present a letter for Board consideration that expresses concern about the Energy Employees Occupational Illness Compensation Program Act (EEIOCPA) and encourages Congress to take action to strengthen it. Given the timing of the election, the group felt it best to readdress the issue with the new Congress. David said he had also been corresponding with Ann Lockhart, President of the Rocky Flats Cold War Museum Board. She has requested letters/resolutions of support from affected governments, and a Board resolution endorsing the continued efforts of the Museum. David said he will look at the request and develop an agenda item for the November Board meeting. Next, David provided an update on his experience as a panel member at a State and Tribal Government Working Group conference in late June. He said there were six members on the panel, including former Rocky Flats site manager Frazer Lockhart. The panel members talked about lessons learned at Rocky Flats. One thing David noted was, although DOE has a success story at Rocky Flats (such as the contract model, public involvement, cleanup strategies, etc.), it is not widely replicating this strategy. The New Mexico site is looking closely at Rocky Flats. Their Citizens Advisory Board toured the site in early August, and met with representatives from DOE, EPA and CDPHE. LANL is working on setting up a community organization similar to the Rocky Flats Coalition of Local Governments and Rocky Flats Stewardship Council, and are looking particularly at crafting effective interaction with regulators. Finally, David noted that the DOE Office of Health, Safety and Security is launching public website focusing on chronic beryllium disease. David explained that some people are sensitive to beryllium, while others are not. National Jewish Hospital in Denver is at the forefront of studying and treating this disease. The website will be a valuable source for providing up-to-date resources to former workers and their families.

Public Comment

There was none.

Board Review of Stewardship Council Activities for 2012 and Initial Review of 2013 Work Plan

The 2012 Stewardship Council work plan provides that the Board shall review its work for the year. The review shall include an assessment of how the organization can improve in the coming year, focusing on areas of weakness and opportunities for improvement. The review is a first step the Board will take in approving the 2013 work plan. The draft 2013 work plan contains minor updates to the 2012 plan. Formal approval of the 2013 work plan will take place at the November 5th meeting.

David Abelson began by delving a bit into the history of the RFSC since it was formed in March 2006. At that time, no one was sure how long this group would be around. The Stewardship Council staff started out with a 6-month contract. David reflected that it feels like the group is entering a new phase. There are more governments participating now than during cleanup. At the site, a baseline has been established in terms of conditions and treatment needs. David asked the group to consider whether the Stewardship Council needed to make any substantive changes to its activities or whether it was on the right trajectory. Bill Fisher said he believed that one of biggest issues was dam breaches. He said he felt like plans were moving forward a bit too quickly and wondered what others thought. Also, he said that issue led him to wonder how the

Board might best deal with similar issues in the future. David Allen responded that, through participation, the community has been able to buy a little more time before final removal of the dams. The site is in a monitoring mode, with a year or so before the two Points of Compliance at Indiana Street are eliminated, and a few years until dam breaches. He said that the communities did not get everything they wanted, but ended up generally supportive of what was put in place. Bill added that he was not so sure that anyone could really understand what will happen at the site in the future yet.

Deb Gardner asked how much influence the Board had over how DOE approached its dam breaching methodology. David Allen said the process was fairly well-defined, although the timeframe was a bit chaotic. David Abelson explained that at a certain point, the Board decided those governments that were most impacted by a particular issue would lead on these issues, and Board as a whole would serve to support them. In terms of dam breaching, the group was able to get DOE to agree to a longer monitoring time prior to physically performing the breaches, which really met the core interests of the local governments.

Tim Plass noted that he saw a lot of 'tracking' activities in the workplan. He felt this was a pretty passive approach and was wondering if there was anything more proactive the group could be working on. David Abelson explained that on all issues except for the Refuge, the Board has to be very careful about how it tackles its activities because of the Federal Advisory Committee Act (FACA). This law governs how federal agencies can and cannot take advice from outside parties. Within the past couple of years, the Board has had to deal with this issue because of claims (later proven to be without merit) from another group that the Board was acting as a FACA group. Also, the Board has decided not to discuss the proposed Northwest Parkway except for issues related to contamination. Scott Surovchak commented that the Board has to be very careful about how letters are drafted (i.e. they cannot be recommendations). The official language creating Local Stakeholder Organizations specified that they were intended to serve as 'conduits' to the agencies from the public.

Bob Briggs asked Joyce Downing for her input as new member. She commented on the learning curve, said the information was enlightening, and felt that questions from other members helped her better understand the issues. Mike Shelton said that he really liked the overview of contaminants and recommended that that presentation be done at beginning of each new Board member term.

Murph Widdowfield asked if there was any update on the Refuge. David Abelson responded that the new discussions regarding a Front Range trail system was the first indication from the Department of the Interior that they might be interested in doing some work at the Refuge. Murph then asked DOE for an update on the Candelas project in Arvada and whether there were any contamination issues. He said he would like to be able to answer questions that have arisen. David Abelson said that while discussion of a particular development was mostly beyond the scope of the Board, they could easily present more information about issues such as the CDPHE health/dose reconstruction studies and OU3/offsite areas contamination. He referred to an existing fact sheet that could be found on the Stewardship Council website. Shelley Cook commented that Arvada looked at all studies regarding contamination, as well as required new studies, prior to approving this development. Deb Gardner noted that she was a member of the

Rocky Mountain Greenways Steering Committee, which has only had one meeting so far, and that she will keep the Board informed as needed.

The board did not offer any changes to the draft work plan as presented.

FY 13 Budget – Initial Review

The Board was required to review the draft FY 13 budget at this meeting. Formal budget hearings will take place at the November 5th meeting. David noted that the budgeted expenses are approximately \$20,000-\$30,000 greater than projected expenses. This cushion allows for unplanned expenses without requiring additional budget hearings. David emphasized that the Board directly controls all budget decisions, and that this approach follows the approach the Board adopted in prior years. The FY13 budget tracks the current year budget.

The Board's attorney, Barb Vander Wall, explained that since the Stewardship Council is organized under Colorado statutes as a unit of local government, it is subject to the same laws. These requirements include that a notice be published to advertise a public budget hearing, and then the Board must approve and adopt the budget.

The board did not propose any changes to the draft budget as presented.

Host DOE Annual Meeting

DOE briefed on site activities for the first quarter of 2012 (January—March).

Surface Water – George Squibb

George noted that it was a pretty dry spring, with only 0.31 inches of total precipitation, approximately 25% of the 1993-2011 average of this period. Water levels were below the outlets of the ponds, with levels ranging from 0.9-7.4% of average. The site completed breaching two dams in spring, right after the first quarter ended (A-3 and the Present Landfill pond). George showed a couple photos of each. He said that snow precipitation levels are not measured because the samplers are not heated. Hydrologic data showed that flow rates ranged from no flow at GS10 to 101% at SW093. George reported that samples at all Points of Compliance (POCs) were below applicable standards. Reportable 12-month rolling average values for uranium at GS10 continued to be observed through the quarter. The site has determined that the uranium is mostly natural, and will be sending additional samples to LANL for further analysis. He added that it has been difficult to get much data, due to the very dry conditions.

George moved on to a discussion of sampling results at the two landfills. At the Original Landfill (OLF), surface water quality results were all below standards for the quarter. At the Present Landfill (PLF), the arsenic concentration was above the standard in a sample collected in January, which triggered monthly sampling. In the first monthly sample collected in March, the arsenic concentration was below the standard, resulting in the discontinuation of monthly sampling.

Murph Widdowfield asked what the source of the arsenic was. George said that much of it is naturally-occurring, and some could be from the landfill. Shelly Stanley asked if dryness affected the concentrations. George said it did for some constituents. Tim Plass asked if LANL results for uranium would affect management actions. George said he was not sure if this would actually lead to an action, and that they are mostly interested in finding out if something has changed in terms of the ratio of man-made vs. natural uranium. Deb Gardner asked at what point they would decide to mitigate. George said that after groundwater passes through this location, there are still four more places where it is monitored before it leaves the site. Since they have not seen elevated uranium anywhere else, there was no cause for alarm; however the levels do trigger consultation with the regulators. They are also seeing the levels trending down. Mike Shelton asked if the primary expense of maintaining dams was management, and how quickly these costs would be recovered after breaching. George did not know the answer to this question. Murph Widdowfield asked if any selenium was found, and George said not in this quarter. Shelly Stanley asked if George thought the results were being caused by groundwater. He said they are still trying to figure that out, but that because the levels are so low, it is more difficult to trace. George was also asked if the site designed the dams to withstand a 100-year storm event. He said that they did, and they would withstand even more than that.

Groundwater Monitoring – John Boylan

John noted that the first quarter is a light sampling quarter, and includes RCRA wells at both landfills. Extra groundwater sampling was performed at the East Trenches Plume Treatment System (ETPTS) in the 4th quarter (2011) that showed elevated VOCs in the effluent. A confirmatory sample in same quarter showed similar results. In response, the site revised the flow configuration from parallel to series. A sample in the first quarter showed return to normal treatment. Additional (non-RFLMA) monitoring during the quarter included several locations associated with treatment systems.

At the Solar Ponds Plume Treatment System (SPPTS), methods are being evaluated for uranium treatment. Lab tests using zero valent iron (ZVI) worked well, however upon full-scale application (longer residence time) it did not work well. Microcell uses short residence time and small media volume. They are now testing ion exchange (IX) resin ZVI; the results to date are promising.

At the Mound Site Plume Treatment System (MSPTS), the site evaluated air stripper treatment. Observations through the quarter suggested no freezing concerns and minimal maintenance needs.

David Allen asked how the site handles variability in flow tests with microcells. John said that the pump that supplies water maintains a fairly consistent flow, so this has not been an issue. The goal is to make the residence time at or under 50 days. David asked what the effluent nitrate level was. John said it was non-detectable.

Site Operations – Rick Di Salvo

Rick noted monthly inspections at the Original Landfill (OLF) were completed on January 30, February 28, and March 29, 2012. Seep locations produced surface flow temporarily after the melting of precipitation events. Wetland vegetation on the OLF cover was dormant throughout

the first quarter. Settlement monuments were surveyed in March and data were within the expected range per the *Original Landfill Monitoring and Maintenance Plan*. Inclinometers were measured monthly. Very little deflection was noted in the first quarter (and the last 18 months). Previous work to improve drainage and re-grade the west channel, along with routine maintenance, seems effective in mitigating localized instability.

The annual site inspection took place in March. This inspection required several activities. First is an inspection and monitoring for evidence of significant erosion, which includes conducting visual observation for precursors of significant erosion, and evaluating proximity of any significant erosion to subsurface features. Second, the site must inspect the effectiveness of institutional controls (ICs). This includes evaluating any evidence of violation of ICs and determining whether required signs are in place, as well as verifying that the Environmental Covenant is in the Administrative Record and on file with Jefferson County (verified March 19, 2012). This inspection also covers looking for evidence of any adverse biological conditions.

In order to carry out the inspection, the Central Operable Unit (COU) is divided into five areas (see report for map). The SW027 drainage area is also inspected due to the erosion controls added in 2010 as follow-up to elevated plutonium levels in 2010. Landfills, treatment systems, and water monitoring stations are inspected during the year on a routine basis. The team walked down the surface of each area to observe conditions. They did not find any significant problems. No significant erosion was noted, only some holes and surface debris. Holes were filled in and debris and trash was collected or flagged for pickup. No adverse biological conditions were noted. No evidence of IC violations was found. All signs were in place.

CERCLA Five Year Review - Rick DiSalvo

The Five-Year Review, as required by CERCLA. The 2012 review is the third one DOE has conducted. The report, including the EPA concurrence letter, was posted on the Rocky Flats website in July. Public notice also included an email to stakeholders and newspaper notice in early August.

The report concluded that the Central OU is protective of human health and the environment. Surface water concentrations are meeting standards at the points of compliance, and monitoring and maintenance plans and institutional controls are working to prevent unacceptable exposure to site contaminants. The results show that, because conditions in all OUs associated with the site are protective, the Rocky Flats NPL site is protective of human health and the environment. Report recommendations include

- 1. continuing evaluation of elevated concentrations of uranium, plutonium, and americium at GS10;
- 2. evaluating the effectiveness of erosion controls and reseeding mitigating actions in the SW027 drainage area (when water flows at SW027);
- 3. DOE and CDPHE consulting to replace the environmental covenant with a restrictive notice as described in the 2011 CAD/ROD amendment; and
- 4. discontinuing specific vegetation monitoring in OLF inspections (where they have met success criteria).

The next review report is due August 3, 2017, per the EPA concurrence letter.

Shelly Stanley asked what would happen with a brush fire at the site. Rick said this was covered by the vegetation management plan. Temporary erosion controls would be in place until success criteria were met. The site would inspect the affected area, determine where erosion controls and revegetation were necessary and then implement. Data from a pre-closure controlled burn shows that vegetation came back well.

Briefing on Revegetation Work

Jody Nelson, the sites ecologist, led the briefing. As mentioned in the actinide migration evaluation (AME) briefing at the June Board meeting, establishment of a robust re-vegetation cover in the soil surface is imperative to help minimize the transport of actinide contamination (plutonium, americium, and uranium) into surface water.

Jody started with revegetation efforts on the 903 Pad and Lip Area. The goal was to establish a good stand of native vegetation. Seed mixes used were based on dominant native prairie species (with no exotic, non-native species used). Different mixes were used for different slope positions, moisture regimes, etc. Seeding was conducted by broadcasting and erosion blankets were placed to protect soil while the vegetation was established. Success criteria from both DOE and EPA were incorporated at the site. The 903 pad and lip areas have met both success criteria.

Jody next discussed the SW027 hillside, where the 12-month rolling average for plutonium-239/240 initially exceeded the RFLMA surface water standard in April, 2010. The vegetation and erosion controls on the hillside and South Interceptor Ditch (SID) were evaluated. Interseeding of selected locations with lower foliar vegetation cover was conducted on the hillside in June 2010. Additional erosion controls (Filtrexx Siltsoxx wattles – filled with wood chips, compost, and seed) were installed on hillside in December 2010. Sparsely vegetated areas within the SID were reseeded and had erosion mat placed in December 2010. A January 2012 status report showed:

- Increased vegetation cover on hillside
- Filtrexx Siltsoxx wattles in place and holding up.
- Vegetation grown up around wattles and coming up through wattles.
- South Interceptor Ditch (SID) vegetation increasing and erosion mats holding up in place

The status report recommended including the SW027 drainage area in the 2012 annual inspection and revegetation surveys, and to continue interseeding as appropriate.

Jody explained that some areas were sparsely vegetated because the SID was dry. However, even with the drought, vegetation is still doing very well. He explained that dry conditions force roots down further into the soil, which is actually a benefit of drought conditions. Deb Gardner commented that drought may be the "new normal" for this area and asked if there were any plans to address this. Jody said that if conditions were to change, they would re-seed and could even modify the seed mix they use. Vera Moritz noted that some grass seeds being used at Rocky Flats were developed in the New Mexico desert.

Shirley Garcia asked about the status of weed management at the site. Jody said that they conduct weed mapping, spraying, and mechanical control. He added that they released all of the available bio-controls as well, and that these are working really well. He gave an example of a type of weevil doing a very good job of controlling Dalmatian toadflax. Tim Plass asked about climate change resiliency, and commented that he could see an exacerbation of events (drought could be followed by extreme wet conditions). Jody replied that the site is always monitoring and will continue to re-evaluate their plans in light of any new conditions. He added that seed mixes will also help address this, as this provides options for plants that may grow under certain circumstances.

Public comment

There was none

Updates/Big Picture Review

November 5, 2012

Potential Business Items

- Approve 2013 budget
- Approve 2013 work plan

Potential Briefing Items

- DOE Quarterly update
- NRD update
- Original landfill performance

February 4, 2013

Potential Business Items

- Elect 2013 officers
- Adopt resolution re: 2013 meeting dates
- Approve letter re: workers benefits

Potential Briefing Items

- Host LM quarterly public meeting
- NRD update
- Original landfill performance

Issues to watch:

Americium and uranium levels upstream of pond B-3 Adaptive Management Plan water quality testing results Solar Ponds Performance

Member Updates:

Shelly Stanley commented that she had recently reviewed the citizen sampling report from the health studies done in the 1990's and that she found the information very helpful. David Abelson said he would incorporate this into future Board topics or information.

Bob Briggs asked members to go around the table and provide any relevant updates from their constituencies. Chris Hansen said that Superior was addressing their comprehensive plan, as well plans for an overpass as part of the second phase of Highway 36. Deb Gardner said that the regional trails project was moving forward and that she would provide updates to the Stewardship Council. Ann Lockhart announced an Atomic Photographers Guild exhibit, which would be held at the Rocky Flats Cold War Museum site in Arvada from September through October. She added that they were in the design phase of museum development and that they had just hired a part-time person to help with fundraising efforts. Shelley Cook noted that Arvada had invited Scott Surovchak and Joe Legare to speak with their council on local television about Rocky Flats. She said this was very helpful and would recommend it to other cities. Bill Fisher noted that President Obama was going to be in Golden that week. Thornton has issued a Stage 2 drought warning, which includes mandatory watering restrictions into next year. Tim Plass noted the successful hosting of the Pro Cycling challenge, with minimal damage to open space, even though there were 10,000 people on Flagstaff.

David Abelson noted that a DOE-LM Stakeholder survey was emailed out to various people at national sites. Not all Board members will receive it. It concerns issues related to communication processes. Bob Briggs announced that Westminster has some historical lectures coming up. John Dalton asked if anyone had an update on the Northwest Parkway. Bob Briggs said that he had heard that a judge has lawsuits under advisement at the present time.

The meeting was adjourned at 11:17 a.m.

Respectfully submitted by Erin Rogers.