

Monday, June 1, 2009, 8:30 – 11:30 AM
Rocky Mountain Metropolitan Airport (formerly Jefferson County Airport)
Terminal Building
11755 Airport Way, Broomfield, Colorado

Board members in attendance: Lorraine Anderson (Director, Arvada), Marc Williams (Alternate, Arvada), Carl Castillo (Alternate, Boulder), Meagan Davis (Alternate, Boulder County), Lori Cox (Director, Broomfield), David Allen (Alternate, Broomfield), Faye Griffin (Director, Jefferson County), Kate Newman (Alternate, Jefferson County), Sheri Paiz (Director, Northglenn), Shelley Stanley (Alternate, Northglenn), Matt Magley (Alternate, Superior), Bob Briggs (Director, Westminster), Ron Hellbusch (Alternate, Westminster), Jeannette Hillery (Director, League of Women Voters), Shirley Garcia (Director, Rocky Flats Cold War Museum), Roman Kohler (Director, Rocky Flats Homesteaders), Karen Imbierowicz (citizen).

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

Attendees: Laura Frank (ProPublica), Leroy Moore (Rocky Mountain Peace and Justice Center), Diane Chesbro (Golden City Council), Eric Barnes (Wagner, Burke & Barnes Independent Auditors), Vera Moritz (EPA), John Dalton (EPA), Carl Spreng (CDPHE), Scott Surovchak (DOE-LM), Rick DiSalvo (Stoller), Bob Darr (Stoller), Jeremiah McLaughlin (Stoller), John Boylan (Stoller), George Squibb (Stoller), Jody Nelson (Stoller), Jennifer Bohn (RFSC accountant).

Convene/Agenda Review

Chair Jeannette Hillery convened the meeting at 8:35 a.m. There were no changes to the agenda.

Business Items

The first item of business was for the Board to ratify three letters regarding the “Charlie Wolf Nuclear Compensation Act” (S.757; H.R. 1828). Following its unanimous endorsement of the Charlie Wolf Act at the last meeting, the Board directed staff to draft letters to the Chairman and Ranking Member of the three committees of jurisdiction, with copies to the Colorado Congressional delegation and key federal agencies. The letter was vetted with the Board and was sent to these recipients. Formal approval is needed at the meeting.

Lori Cox moved to approve the letters sent regarding the Charlie Wolf Act. The motion was seconded Lorraine Anderson. The motion passed 12-0.

The next business item was the consent agenda. Bob Briggs moved to approve the April Board meeting minutes. The motion was seconded Roman Kohler. The motion passed 12-0.

Karen Imbierowicz moved to approve the checks. The motion was seconded Lorraine Anderson. The motion passed 12-0.

Executive Director's Report

David Abelson noted Ray Reling has been appointed first alternate for the City of Northglenn. Also, David noted that Don Rohlf has resigned from the Rocky Flats Cold War Museum, so the Museum Board will designate someone to replace him on the Stewardship Council shortly.

David next touched on the topic of the Charlie Wolf Act. He has emailed Seth Kirshenberg, Director of the Energy Communities Alliance (ECA), asking that ECA and its individual members issue statements of support for this Act. However, apparently some of ECA's local government members are concerned about change in the presumption of exposure in the Act. David and Lorraine will continue to work with the ECA and provide information as needed. Senator Harry Reid has indicated an interest in getting this Act passed this year.

Within the DOE Office of Legacy Management (LM), the political appointee process has been delayed, as things are just starting to move through system. LM still has an interim Director, but one with experience and who knows the issues. If a new Director is chosen, David plans to travel to Washington, D.C. in the fall and meet with that person to explain the role and importance of the Stewardship Council.

David noted that there is currently no reason to expect anything other than full funding for the DOE-LM office. If this changes, David will update the Board.

The Council's annual Rocky Flats tour is scheduled for June 11, with a backup date of June 25. Please let Rik know if you are interested in attending. He said he would send an email later in the day with further information. Rik mentioned that the group will be able to see the new solar ponds treatment system as part of the tour.

Rik also reported that Rocky Flats is in the process of releasing water from all three terminal dam ponds. George Squibb will update in more detail later in the meeting. All water is being sampled prior to release, and no problems have been found.

Rik's next update addressed the proceedings of the Colorado Water Quality Control Commission (WQCC). The final step in the Commission's process will be a rulemaking hearing. Rocky Flats is just a small segment of what the Commission is looking at overall, which includes several water basins. One change that will affect Rocky Flats is the result of its petition for an ambient arsenic standard of 10 µg/L. If the petition is denied and the site must comply with the new standard of .02 µg/L, it will be difficult to meet. Arsenic is naturally occurring in the area. The new standard will affect drinking water and wastewater treatment for local governments as well.

David Allen asked Rik if there was any update on the Commission assigning a new use classification at Rocky Flats. Rik said that the response provided to DOE allowed for a non-contact recreational classification within DOE lands, and a primary contact designation for the wildlife refuge.

Public Comment

Leroy Moore, Rocky Mountain Peace and Justice Center: In April, he met with the Assistant Secretary of Energy for Environmental Management, as well as community representatives from current nuclear weapons complex cleanup sites. He wanted to make the request that DOE stop referring to the cleanup of Rocky Flats as good model for other sites. His reasons for this request included the following: 1) inadequate attention was paid to the toxicity of plutonium; 2) the Rocky Flats cleanup as designed, either on purpose or by accident, failed to consider a lot of evidence that should have been considered. Leroy has written a paper entitled '*Plutonium and People Don't Mix*'. He will email it to David for distribution to the Board. He added that he appreciates that everyone here is continuing to pay attention to Rocky Flats issues.

Receive Stewardship Council 2008 Financial Audit

Eric Barnes of the auditing firm Wagner, Burke & Barnes, LLP presented the results of the annual audit of the organization. By law, the Stewardship Council does not need to conduct this audit, but the Board decided at beginning of its operations to monitor the fiscal health of the organization via an audit.

Mr. Barnes said that this audit was uncomplicated and that the Council's records are in good order. He added that David Abelson and Jennifer Bohn are doing a good job in documenting and tracking the expenditures. He walked the Board through various section of the audit report. Page 1 contains the report by the auditors. This report conveyed that the Council's financial statements present a fair position of Stewardship Council. This is known as a 'clean' opinion. Page 2 lists total assets as of 12-31-08. Page 5 is a statement of revenue and expenditures, showing the largest expense item as contract personnel. Page 7 compares expenses to budgeted amounts. Total expenditures were under budget by \$55,000, with the major differences being in the personnel and contractual line items. Page 12 shows that everything is insured, there is no risk, and that the Council operates in a conservative financial position. Mr. Barnes also noted that the Board has disposed of nearly all of its capital assets. Jennifer Bohn pointed out a typo, which Mr. Barnes will correct in the final draft. Lori Cox asked a question about terms on page 10, which refer to the Board's use of unrestricted and restricted funding. In this case, 'restricted' refers to the DOE grant and 'unrestricted' refers to local government contributions and carryover funds. She asked if the method for choosing one source or another for a particular expense is written anywhere. David Abelson said that it is not, but the closest description can be found in the Board's annual budget showing sources of revenue. David pointed out the budget vs. actual expenses on page 7. He explained that the Board controls actual expenditures, but padding certain line items is used as a way to avoid supplemental budget hearings if the Board decides to initiate new (un-budgeted) projects during the fiscal year. For 2009, there is a little less cushion built in. He also explained that Jennifer submits quarterly requests to draw on the Council's DOE grant based on upcoming expenses.

Roman Kohler moved to approve the 2008 Stewardship Council Audit, with the suggested correction. The motion was seconded Lorraine Anderson. The motion passed 12-0

Continue Discussing Interpretative Signs for Rocky Flats National Wildlife Refuge

The Board moved into a continued discussion of signs for Rocky Flats. This conversation was set up for the Board to identify categories of information and the types of messages it believes should be conveyed regarding the history of the site as a weapons facility, without suggesting specific language.

David noted that representatives from USFWS were not able to attend this meeting, but have passed along to him that they are concerned that the Stewardship Council will recommend too much information for the signs. He said they are also concerned about the roles of the Cold War Museum and the Stewardship Council. David said he explained to the agency that the missions of the two organizations are in line.

David suggested that the Stewardship Council put forth ideas for the types of information that should be provided to visitors, along with detailed explanations for why these messages should be included. He also recommends aiming for objective facts, rather than any value judgments. The Board will also likely recommend information be conveyed about ongoing management activities. David said he has communicated this type of goal on behalf of the Board to the USFWS, and that there still may be some level of discomfort within the agency.

Lorraine Anderson said she thinks David is on the right track with these parameters. She asked if the signs in question include those on the DOE lands. She said her preference would be to focus only on refuge lands. David Allen said he likes the idea of the Board providing this type of information, and added that the Board's 'talking point' papers cover a lot of this information. David Abelson said he agreed. Carl Castillo asked if the USFWS process would involve draft wording coming back to this group for comment. David Abelson said that the short answer is yes, since this is part of one of the agency's 'step-down' plans. He said the last similar action was put through a process of informal public involvement, and that he would expect them to reach out in a similar way on the sign issue. Carl then asked how Rep. McKinley's bill would play into this process. David said that the McKinley bill only addresses entrance signs, and language for these signs has already been adopted by USFWS. The signs being discussed now are additional interpretive signs to be posted at various points within the refuge. Ron Hellbusch said he thought if Steve Berendzen of USFWS were here, that he would support David's approach. He said USFWS is trying to get as much consistency as possible across the country on signage at similar new sites. Shirley Garcia said that the Cold War Museum has an education committee, which is working on an exhibit for next summer and are trying to combine various Rocky Flats timelines into historical facts and key points. She said they would love to have anyone join them. Jeannette Hillery asked Shirley to keep the Board in the loop so it can support the Museum when needed.

Jeannette directed the Board to page two of a memo in the Board packet that listed framing topics for this discussion. She asked the Board if these topics were enough or if they needed to be expanded.

Lorraine said that the list covered the major topics that the Board should be considering for signs, and that the Museum may be able to fill in some of the gaps. Karen Imbierowicz asked if

bullet #1 addressing the ‘History of Cleanup’ should also mention the history of Rocky Flats in general. David noted that the Board must determine how broad the scope should be, and added that staff could present options of different approaches to the Board for its consideration. Carl Castillo asked about whether to explain the reasons the remediation that was completed. David Abelson acknowledged that this was not exactly spelled out, but he would play around with wording and ideas. He also pointed to three eras at the site; production, cleanup, and from this point forward. Scott Surovchak said that the history is not quite as clear-cut as that. He pointed to quite a bit of overlap in activities (i.e. various ongoing cleanup activities since the 1950’s). Lorraine said this is reason the Board needs to distinguish between the industrial area and the rest of site. She said the Stewardship Council is funded to talk about issues related to the existence of Rocky Flats, such as why there was a buffer zone, and if there was contamination. David Abelson clarified that he was not trying to get into anything about the history of the site beyond the DOE mission. The Board will break the site history into categories, and then deal any overlapping issues.

Briefing on Site Monitoring Program

As a follow-up to the April 2009 cleanup briefing, this briefing was scheduled to explore the site monitoring program in greater detail. The conversation was set up to focus on the need for ongoing monitoring, what is being monitored and what is not, the frequency of monitoring, and other related issues.

Scott Surovchak began by strongly recommending that anyone interested in Rocky Flats attend the June site tour. He then began his presentation on ‘Why We Are Here’, a broad overview of DOE’s current monitoring and maintenance responsibilities at Rocky Flats. These activities include:

- Physical controls (signs are inspected quarterly)
- Institutional controls (annual inspection of Central Operating Unit to ensure effectiveness of IC’s and verify that the required state of Colorado environmental covenant remains on file)
- Surface water and groundwater (Rocky Flats Legacy Management Agreement (RFLMA) Table 2: Water monitoring locations and sampling criteria)
- Landfills (RFLMA Table 3: Present and original landfill inspection and maintenance requirements)
- Residual subsurface contamination (monitor for significant erosion annually, and after major precipitation events)
- Groundwater treatment systems (untreated influent and treated effluent; impacts to surface water downstream of effluent discharge point in accordance with table 2 and flowchart decision rules) – to treat 3 significant groundwater plumes onsite. This will be a long term job, especially with regard to organic contaminants.
- Ecological sampling required by RFLMA is complete
- Operational (boundary wells, pre-discharge pond sampling, adverse biological conditions)
- Others:
 1. Threatened and endangered species

2. Revegetation
3. Best management practices (road and fence maintenance, prairie maintenance (wildfire), weed management)
4. Wetland mitigation

The following were included in the presentation:

- RFLMA figure 1, shows monitoring points (about 100)
- RFLMA table 2 example, water monitoring locations and sampling criteria (frequency, analytes, types of analysis, etc.)
- RFLMA table 3. PLF, OLF Inspection and Maintenance Requirements, includes exit strategy.

Ron Hellbusch asked if this presentation would be posted online. Scott said it would be. David Abelson referred back to Leroy Moore's comments earlier in the meeting which implied that the cleanup was unsafe and noted how this presentation pointed out the ongoing monitoring and communication of remaining contamination, and also the collaboration with the regulators and the community. Lorraine Anderson said she wished Leroy would have stayed for this presentation and that the Peace and Justice Center opposed cleanup from beginning and is now disparaging what was done. She added that Scott did great job of outlining why the cleanup was done well, and that DOE's Assistant Secretary for EM needs to hear that this group does not agree with RMPJC.

Host DOE Annual Meeting

DOE next briefed the Stewardship Council on site activities for calendar year 2008. Activities included surface water monitoring, groundwater monitoring, ecological monitoring, and site operations (inspections, maintenance, etc.). DOE has posted the Annual Report on its website.

Surface Water Monitoring and Operations

George Squibb with Stoller began by discussing surface water monitoring and operations. Pond operations saw no discharges, due to lack of precipitation. More recently, levels reached as high as 57% in Pond B5, as well as high levels in other ponds, leading to a current round of discharges. These will probably be finished by June 6, and will involve 3-12 million gallons. The site is collecting several composite samples for each pond, and also at Indiana Street.

The site is also in the process of completing a dam breach project, in order to reduce long term maintenance and to remove the dams from regulatory requirements. Breaching of Dams A-1, A-2, B-1, B-2, B-3, and B-4 was completed in March 2009. The next dams to be breached will be in 2012 and 2018. This gives the site time to collect additional water quality data and see how the system is working at Pond A1.

Hydrologic data for CY 2008 showed total precipitation of 9.4 inches, which was 76% of the average. Flow rates were very low (none to 12% of average).

As reported in previous quarterly updates, water quality at all Points of Evaluation, except GS10, was below applicable standards. Reportable values for total uranium at GS10 continue to be observed and are probably caused by groundwater contributions of naturally-occurring uranium to South Walnut Creek.

Monitoring at the original (OLF) included surface water quality results during CY 2008 that triggered monthly sampling for selenium per the RFLMA. Selenium was not detected in three consecutive monthly samples; therefore, monthly sampling was discontinued.

Monitoring at the present (PLF) landfill included surface water quality results that triggered monthly sampling for selenium, silver, and vinyl chloride. No analytes were detected in three consecutive monthly samples; therefore, monthly sampling was discontinued.

Groundwater Monitoring and Operations

John Boylan spoke next about groundwater monitoring and operations. All Area of Concern (AOC), Sentinel, and Resource Conservation and Recovery Act (RCRA) wells were monitored. Treatment system locations were monitored. The results are included and evaluated in the 2008 Annual Report. All groundwater treatment systems continue to remove contaminants from the groundwater.

The Mound Site Plume Treatment System (MSPTS) treated approximately 358,000 gallons. This continues a trend observed since 2005, wherein volume treated is significantly greater than that treated before 2005. Contaminant concentrations in system influent continue to reflect presence of Oil Burn Pit (OBP) #2-impacted groundwater. This indicates that the diversion installed in 2005 to route OBP #2 water to the MSPTS continues to be effective. Effluent water quality is generally consistent with that of previous years.

The East Trenches Plume Treatment System (ETPTS) treated approximately 629,000 gallons. This continues the trend observed since 2006, wherein volume treated is significantly lower than that treated before 2006. Contaminant concentrations in the system influent and effluent water quality are generally consistent with previous years. Slight increases in effluent concentrations of some contaminants (e.g., PCB, TCE), and media clogging, will lead to media replacement maintenance activity in 2009.

The Solar Ponds Plume Treatment System (SPPTS) treated approximately 280,000 gallons, which is generally consistent with previous years, but does reflect a slight increase and is the highest volume treated since 2003. This reflects additional influent from Phase I upgrades, which were completed in October. Contaminant concentrations in system influent were generally consistent with previous years until Phase I was completed. Following Phase I, concentrations of nitrate went up 2 to 3 times, and uranium went up less. Effluent water quality was acceptable prior to Phase I, then additional flow and contaminant load challenged the media. Phases II and III will improve treatment and inform Phase IV.

John reported that of all statistically significant (at the 95 percent level of confidence) trends identified in statistical trending evaluations for the 2008 Annual Report, 54 are decreasing and

44 are increasing. See the 2008 Annual Report text, tables, figures, and Appendix B for well- and chemical-specific details.

Additional samples were collected at and around the SPPTS. There was also additional characterization of waters collected in the ITSS. The site continues to assess the effects of the Phase I upgrades and is not satisfied with the results to date. Results of Phase I upgrades included:

- Flow volume increased
- Concentrations of nitrate and uranium increased
- Media challenged
- Concentrations of nitrate and uranium in system effluent increased

The net effect is that, although concentrations in system effluent increased, concentrations of nitrate and uranium in water at the Discharge Gallery (DG) have decreased.

Phase 2 will involve performing uranium treatment in the first cell, which will save on the cost of low-level radioactive waste disposal. For Phase 3, the site is looking at inert plastic media (testing in Cell A), and corn stover, a reactive organic media (testing in cell B). Bob Darr asked how often these types of media would need to be replaced. John said that the corn stover would be replaced about every 5-6 years, and that since plastic is nonreactive, it should not have to be changed out, perhaps only backwashed.

David Abelson asked if there was a timeline for an exit strategy or closeout at the Mound or East Trenches sites. John said they had done some modeling, but they are probably looking at hundreds of years yet. He added that new technologies will also be considered. He said the Solar Ponds should be quicker, as they are closer to the uranium standard. David asked if there is there a way of transferring this kind of technical data throughout DOE cleanup sites. Scott Surovchak said that is done regularly. David Allen asked about the statistical trending showing that 44 are increasing, and asked if this was any cause for concern. John said that more are decreasing than increasing, and that since no source is being added, we should see more decreasing.

Annual Site (COU) Inspection

Rick DiSalvo discussed that annual site (COU) inspection. Each year, the site conducts this inspection that includes visual observation for precursors of significant erosion; evaluating proximity of any significant erosion to subsurface features. They also inspect the effectiveness of institutional controls (ICs) by looking for any evidence of violation of ICs and determining whether required signs are in place. They also confirm that the state of Colorado environmental covenant is in the Administrative Record and on file with Jefferson County. The staff also looks for evidence of any adverse biological conditions. The inspection is performed by walking over the whole surface of the COU, including areas where people rarely travel onsite.

The results of the annual inspection showed no significant erosion, only minor holes, small animal evidence, and depressions identified. These were in very limited aerial extent and were

filled in. Debris and trash was collected or flagged for pick up. No adverse biological conditions observed. There was also no evidence of IC violations. All signs were in place.

Water Quality Control Commission

Rick next provided an update on the water quality control commission (WQCC) rulemaking process. Rocky Flats submitted a petition to adopt the statewide basic uranium standard. The WQCC recognized that changed conditions warranted revision.

The Water Quality Control Division (WQCD) said that a mistake was made in promulgating the statewide uranium standard in 2005. The range should be from 16.8 to 30 µg/L (“hyphenated standard”). Many analytes have the hyphenated standard. The statewide uranium standard will be clarified. The higher number applies as the end-of-pipe limit for discharge permits. The lower number is a health-based goal value derived using WQCC methodology (10-6 incremental lifetime cancer risk / 2 liters drunk per day over a lifetime).

WQCC revised the site-specific uranium standard to the 16.8 µg/L (approximately 11.5 pCi/L) health-based standard. A higher ambient-based standard may be addressed in the future, based on data and regulatory considerations, including practicality/feasibility. Gross alpha and gross beta standards were removed; specific radionuclides (uranium, plutonium, and americium) are being monitored.

The Commission also decided to retain Rocky Flats’ expiring temporary modifications (six volatile organic compounds, nitrate/nitrite) and their expiration date (December 31, 2009). The site did not request an extension of the TM’s.

At the June 2009 Rulemaking hearing for the Triennial review of the South Platte River Basin, potential Rocky Flats issues include:

- Rocky Flats TMs expire on December 31, 2009
- The SPPTS upgrade should reduce nitrate loading to North Walnut Creek, but it may not meet 10 µg/L by December 31, 2009
- New statewide basic standard for arsenic (0.02–10 µg/L) below site-specific standard (50 µg/L)

The Water Quality Control Division (WQCD) is offering a few key proposed revisions. The first is a revision of the site-specific arsenic standard from 50 µg/L to the new statewide basic water supply standard of 0.02 to 10 µg/L. Rocky Flats’ post-closure arsenic results have generally been below 10 µg/L. The site has reviewed post-closure monitoring data with WQCD staff and found that the new arsenic standard is in attainment based upon the data presented.

WQCD is also proposing change recreational class from non-contact to contact (segment 4a) and potential contact (segments 4b and 5). Their rationale is based on a misunderstanding of public use (such as potential swimming) of Rocky Flats. Rocky Flats has submitted a response to WQCC regarding post-closure public access restrictions and is discussing this issue with WQCD.

Ecological Monitoring

Jody Nelson provided the annual update on ecological monitoring. Project support for ecological issues was provided for OLF West Channel Project, 2008 Roads Projects, Dam Breach Project, Annual Dam Mowing and Riprap Spraying Project, Solar Ponds Sump Installation and Phase II/III Project, and trash removal (large tank) in the Central OU.

Ecological monitoring included OLF and PLF vegetation surveys, monthly weed surveys in the mitigation wetlands, revegetation monitoring, weed monitoring/mapping, Preble's mouse mitigation monitoring, and wetland mitigation monitoring. Jody mentioned that the site uses a varied approach to weed control including management controls (i.e. using weed-free materials), mowing, and spraying.

The ecology department also maintains permanent photopoint comparison photos. One thing they keep an eye on is prairie dogs, as they want to make sure to keep them off certain treatment areas.

Site Operations

Jeremiah McLaughlin concluded the DOE report with a review of site operations.

At the OLF, 12 monthly inspections were performed in 2008. Fourth quarter inspections were completed on October 29, November 25, and December 29, 2008. Work was also completed on the Seep #7 Drain Extension and Berm Regrade Project in September. A West Perimeter Channel Regrade Project was completed in November. At the PLF, 4 quarterly inspections were completed in 2008, including the fourth quarter inspection on November 25. The settlement monument surveys were completed on June 21.

Jeremiah also answered a question about security patrols, noting they were stopped last fall because there were no incidents.

Public Comment

There was none.

Updates/Big Picture Review

September 14, 2009

Potential Business Items

- Initial review 2010 budget

Potential Briefing Items

- Host LM quarterly public meeting
- Annual review of RFSC activities
- Begin discussing 2010 Work Plan
- Continue discussing interpretive signs for Rocky Flats
- Role of regulators – update on lessons learned under RFLMA

November 2, 2009

Potential Business Items

- Budget hearing for 2010 budget

Potential Briefing Items

- Host LM quarterly public meeting
- Approve 2010 work plan
- Update on Cold War Museum

The meeting was adjourned at 11:30 a.m.

Respectfully submitted by Erin Rogers.