

**ROCKY FLATS STEWARDSHIP COUNCIL**  
**Monday, February 1, 2010, 8:30 AM – 12:00 PM**  
**Rocky Mountain Metropolitan Airport, Terminal Building**  
**11755 Airport Way, Broomfield, Colorado**

**Board members in attendance:** Marc Williams (Director, Arvada), Clark Johnson (Alternate, Arvada), Lisa Morzel (Director, City of Boulder), Carl Castillo (Alternate, Boulder), Meagan Davis (Alternate, Boulder County), Lori Cox (Director, Broomfield), David Allen (Alternate, Broomfield), Greg Stokes (Alternate, Broomfield), Dan Hartman (Alternate, Golden), Shelley Stanley (Alternate, Northglenn), Andrew Muckle (Director, Superior), Bob Briggs (Director, Westminster), Ron Hellbusch (Alternate, Westminster), Jeannette Hillery (Director, League of Women Voters), Sue Vaughan (Alternate, League of Women Voters), Shirley Garcia (Director, Rocky Flats Cold War Museum), Roman Kohler (Director, Rocky Flats Homesteaders).

**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:** Hildegard Hix (citizen), Judith Mohling (Rocky Mountain Peace and Justice Center), LeRoy Moore (Rocky Mountain Peace and Justice Center), Mary Harlow (citizen), Anne Fenerty (citizen), Carl Spreng (CDPHE), Scott Surovchak (DOE-LM), Rick DiSalvo (Stoller), George Squibb (Stoller), John Boylan (Stoller), Linda Kaiser (Stoller), Bob Darr (Stoller), Jeremiah McLaughlin (Stoller), Steve Berendzen (USFWS), Doug Young (Sen. Udall), Cathy Shugarts (City of Westminster), Jennifer Bohn (RFSC accountant).

**Convene/Agenda Review**

Chair Jeannette Hillery convened the meeting at 8:40 a.m. There were no changes to the agenda.

**Business Items**

The first business item was the consent agenda. Bob Briggs moved to approve the November Board meeting minutes. The motion was seconded Lisa Morzel. The motion passed 10-0.

Bob Briggs moved to approve the Board's checks. The motion was seconded Lisa Morzel. The motion passed 10-0.

The next item on the agenda was for the Board to approve a resolution regarding 2010 meeting dates and notice provisions. David Allen noted that the name of the Rocky Mountain Metropolitan Airport needed to be updated on the resolution. Lisa Morzel moved to approve the resolution and meeting notice provisions as amended. The motion was seconded Roman Kohler. The motion passed 10-0.

## **Executive Director's Report**

David Abelson provided several updates to the Board. First, he reported on the continuing discussions with DOE-LM about future funding for the Stewardship Council. He noted that the Board's next triennial review is scheduled for February 2012. The current DOE grant provides funding through February 2011. He is therefore talking with DOE's Scott Surovchak about aligning the DOE grant period with the triennial review. This would allow for a coordinated evaluation of the organization by both the Board and DOE regarding whether the Stewardship Council continues to play an important role, and if DOE believes the group is meeting its mandate as the Local Stakeholder Organization (LSO) for Rocky Flats. David will be in Washington, D.C. for an upcoming ECA meeting, and will discuss this option with the Acting Director of DOE-LM, Dave Geiser. David is hopeful things will continue to progress. While in D.C, David will also meet with staffs from the Colorado Senators' offices, Representative Polis' office and possibly other Congressional offices. He will be updating them on the Stewardship Council's activities and current issues related to Rocky Flats.

David noted that state Representative McKinley has re-introduced a bill pertaining to signage at Rocky Flats. This topic will be discussed later in the meeting. He pointed out that discussions among members have already begun, and that members of the public were present to express their views to the Board on this issue.

Staff recently completed work on the Stewardship Council's Annual Report. David said that this project served as a good opportunity to step back and reflect on the work of the Board. He said the report showed that, although the cleanup was done well, there are still many issues that require continuing public involvement. Issues such as the landfill covers, Solar Ponds treatment system, and dam breaching all reinforce the need for an organized, ongoing presence to monitor progress and bring different perspectives to the table.

Rik Getty provided a brief update about a recent pond discharge. In December, 8.1 million gallons were discharged at Pond A4. Pre-discharge samples were all well below the regulatory limits. During discharge, samples were taken below the dam and at Indiana Street. George Squibb will provide more details during DOE's quarterly report later in the meeting.

## **Public Comment**

Ann Fenerty from Boulder began by stating that she was submitting a written statement on behalf of ten people regarding Rep. McKinley's draft legislation. She said that the five minutes of time allowed for public comment during the agenda item on this topic shows her the level of concern for public comment by this Board. She said Rocky Flats was closed as a result of environmental crimes and that Rep. McKinley knows a lot about site which cannot be disclosed. Ms. Fenerty referred to Rocky Flats' listing as a Superfund site, and a letter to former Representative Beauprez from the US Fish and Wildlife Service in 2003 stating that Rocky Flats was not a pristine site. Therefore, these citizens believe strong signage is needed. She mentioned that several of the signers of this statement are scientists. Jeannette Hillery noted that the Stewardship Council was not trying to restrict public comment to five minutes, but that this

amount of time was allotted simply because there have been very few members of the public attending or wishing to comment at these meetings lately. [Full statement attached to minutes]

Leroy Moore with the Rocky Mountain Peace and Justice Center spoke next. He said he has been working on Rocky Flats issues since 1979. He mentioned that he was asked to mention that Dr. Harvey Nichols will also be speaking later in the meeting. Mr. Moore stated that, of the 1,280 parties that commented on the draft EIS for the Rocky Flats National Wildlife Refuge, 81% rejected public access to the site. He also brought up membership requirements related to the Federal Advisory Committee Act that he said the Stewardship Council deliberately bypasses and posited whether this group was a legal entity. David Abelson responded with regard to the FACA issue. He said that two of FACA's primary requirements are open meetings and having the federal agency approve membership, and that the Stewardship Council does both of these things. He said this group is organized under Colorado law, not FACA, and must comply with the Colorado Sunshine Act. [Full statement attached to minutes]

Hildegard Hix read a statement from Sam Dixon. Ms. Dixon is concerned over the prospect of bad signage. She spent 15 years seeing that Rocky Flats was cleaned up, and is concerned that the dangers that still exist be properly signed. She is not sure that determining the wording of signs was supposed to be job of this group. Ms. Dixon believes it should be done by those who know what happened in the past, such as Rep. McKinley, and overseen by CDPHE. Jeannette Hillery pointed out that this group is not determining wording for signage, but has been trying to be collaborative with the USFWS on this issue. [Full statement attached to minutes]

Dr. Harvey Nichols, biology professor emeritus at CU, began by noting he was speaking on own behalf. He said DOE asked him to study airborne particles at Rocky Flats in 1974. He noted deficiencies in their air sampling equipment and found plutonium in freshly fallen snow. In 1987, at a meeting at the State Capitol, Dr. Nichols said he asked representatives from Rockwell if they were routinely emitting small particles of plutonium from stacks, and they said they were. He also asked them if they regarded plutonium as dangerous and they also said yes. Dr. Nichols said that the entire site was dusted with large numbers of plutonium particles, and that it remains a hazard. This is why he supports the signage bill. Dr. Nichols suggested that the Board ask questions and see if there is any other information they want to explore, and added that the vote on the sign bill could be delayed. He noted that radiation research is ongoing, and that what we consider safe today may not be considered safe in the future. He believes that much of the environmental science at Rocky Flats is questionable, even to this day. He pointed to a statement by John Rampe several years ago about the need to burn vegetation to get rid of weeds. When Lisa Morzel asked for samples, Rampe said it would cost too much and turned down her offer to do it for no cost. Nichols said this is not science, and that he has many more examples. He said he supports full and frank signage. [Full statement attached to minutes]

Jeannette Hillery asked all speakers to email their statements to Board for the record.

Judith Mohling from the Rocky Mountain Peace and Justice Center spoke next. She said that the people most vulnerable to plutonium are children, because they have longer lives during which to develop cancers. Also, they would be more likely to eat plants, dirt, and catch snowflakes in

their mouths. She said there is not as much plutonium at Rocky Flats as there was in the past, but that it is still there. She said she imagines the particles stay suspended forever.

Ann Fenerty added that the site has been cleaned partially to a depth of six feet, but that prairie dogs dig down to sixteen feet. She mentioned the statement she read previously was signed by several PhD chemists and that she would like the entire statement reflected in the minutes.

### **Host DOE Quarterly Meeting**

DOE next briefed the Stewardship Council on site activities for the third quarter of 2009 (July – September). Activities included surface water monitoring, groundwater monitoring, ecological monitoring, and site operations. DOE has posted the report on its website.

#### *Surface Water Monitoring and Operations (George Squibb)*

There were no pond discharges or transfers during the quarter. However, Pond A4 was discharged just before Christmas and it took about two weeks. All pre-discharge sampling was below standards. Nitrate values were undetectable. Plutonium and Americium samples were mostly undetectable. The data has not yet been validated, but do not usually change after this point.

Pond levels averaged about 19.4 % of capacity. Precipitation was about average at 3.34 inches. There were low to no flow rates (0-21% of average). Water quality at all points of evaluation was below applicable standards. Lisa Morzel asked about the percentages of anthropogenic (man-made) vs. natural uranium. George said that in the last samples they analyzed, about 30-40% of the activity was anthropogenic. Lisa asked for that this information be provided to the Board. George said they are planning to do another of these studies pretty soon. Shelley Stanley noted that the flow at Woman Creek is 9% of average, and asked what time period is used to calculate the average. George said they use data starting with 1993.

Surface water quality results at the Original Landfill during second quarter 2009 showed acceptable water quality.

Surface water quality results at the Present Landfill (PLF) triggered monthly sampling for vinyl chloride. Vinyl chloride was not detected in the second monthly sample. Therefore, monthly sampling was discontinued. Shirley Garcia asked how many times the site has had to do monthly sampling for vinyl chloride. George said it is probably twice per year. She asked if it was seasonal. He said he was not sure, but will add that analysis to the annual report. Lisa Morzel asked about slumps and cracking at the OLF. George said this will be discussed later in the presentation.

#### *Groundwater Monitoring and Operations (John Boylan)*

John noted that the 3<sup>rd</sup> quarter is a light sampling quarter. He began with an update on the East Trenches Plume Treatment System (ETPTS) project. Media replacement and a system upgrade project were completed. System operations resumed immediately and preliminary results indicate that the system is operating properly. They are primarily treating for solvents at this location. The previous system used two cells in series in a downflow configuration, and John

explained several problems that can occur with this type of system. The updates improved treatment effectiveness, prepared for the next media replacement, and reduced long-term maintenance needs.

Lisa Morzel asked how they know when the media needs to be replaced. John said there are several indicators, such as flow monitoring, pressures, water quality, and visual inspection. She also asked how long the replaced cell had lasted. John said it had been installed in September 2005.

Shirley Garcia asked what material was used for the new treatment cell liner. John said it is HDPE. Shelley Stanley asked what the flow rates are for this project. John said it is 1½ -2 gpm. She asked if they had to remove any soil during the work. John said they did, and then used the same soil as backfill.

At the Solar Ponds (SPPTS), 3<sup>rd</sup> quarter nitrate and uranium concentrations at SPOUT remain consistent with past reports. Since the 3<sup>rd</sup> quarter, treatment results have improved. The most recent data shows that this treatment system is meeting all standards for both nitrate and uranium. Insulation was added to cells and vaults to reduce the effects of cold temperatures. Phosphate (an essential nutrient) was added to the carbon source feeding Phase III Cell A. Phase II is a uranium treatment cell. A geochemist was added as a new technical advisor to the SPPTS technical team to assist investigations of incomplete treatment. Results will be provided and discussed in the 2009 annual report. Shirley asked if these results are these captured on the website. John said that the presentation is posted and for more long term reference, photos are archived and preserved as part of project files.

#### *Site Operations (Jeremiah McLaughlin)*

At the Original Landfill (OLF), monthly inspections were performed throughout the quarter and a vegetation inspection was completed in August.

Seep 4 had some surface expression, but did not show any surface flow. This is likely due to the rock drain that was installed during the West Perimeter Channel Regrade Project. Seep 8 flowed at a rate of 1 to 2 gpm throughout the third quarter. The rock drain located at the base of the West Perimeter Channel flowed temporarily after precipitation events, but was dry throughout most of the third quarter. Seep 7 showed a surface flow of approximately 0.1 gpm during the July inspection. The area was dry during subsequent inspections following the adjustment completed on the drain extension.

As part of the OLF geotechnical investigation, an extension to the original Seep 7 subsurface drain was installed in the OLF cover soil in September 2008. Surface flow along the eastern edge of the drain (below inclinometer 82508I) was observed during second quarter 2009. The planned adjustment to hand-excavate the drain edge and open the geotextile fabric to make the edge more porous was made on July 23 and August 19 and is completed. No further surface expression was noted in this localized area throughout the rest of the third quarter.

Settlement monuments were surveyed on September 30. Data are within the expected range per the OLF Monitoring and Maintenance Plan, which is between 1.34 and 2.86 feet depending on

the location. Inclinometers were measured once each in July, August, and September. Very little deflection was noted, indicating that the movement observed during second quarter in the area between Berms 1 and 3 on the western end of the landfill did not continue.

Areas where the landfill cover is pushed up or rolling are noticeable on the western end of the OLF between Berms 2 and 3; however, the areas continue to remain free of any surface cracking. A new 140-foot-long, narrow, continuous crack that runs along the north and south sides of Berm 1 was noticed during a non-routine inspection of the OLF on July 22. This crack is in the same general location of large cracks that appeared in 2006 and 2007 and observed again during second quarter 2009. The crack was filled and compacted with Rocky Flats Alluvium on July 22; subsequent inspections throughout the third quarter showed no new movement.

Lisa Morzel asked where the inclinometers were located relative to the crack. Jeremiah showed her on the map. She asked if any inclinometers were located outside of landfill area because she is wondering if there is some differential movement between the land slide area and the landfill. Jeremiah said that none are located outside the landfill area. Lisa said it might not be a bad idea to place an inclinometer outside this area just to see if there is a differential. Rick DiSalvo noted that installation of inclinometers is pretty expensive, about \$30,000 apiece. It took four weeks of work to put in the seven existing inclinometers. The geotechnical engineer working on this issue did not recommend placing any of these devices outside of the landfill area. Rick added that the geotechnical report discusses the likely mechanism for these issues with the cover, and the site has reinforced the whole area. He said it is localized and small scale. He added that it is likely to continue, but there is no indication of any type of catastrophic failure. He said that the inclinometers go down to the bedrock. Lisa said that since there is active movement, it is important to know the rate of movement of the landslide vs. the landfill. Rick said there will be a report from the geotechnical engineer in the Annual Report, and we can discuss any additional issues at that point. Rick will note Lisa's request. Scott Surovchak pointed out that measurements are taken at various points along the inclinometer.

Andrew Muckle asked if there is a more permanent solution to these issues with cracking. Jeremiah said it seems to be stabilizing, but if they need another larger scale fix in the future, they will look at options. Rick DiSalvo noted that they will probably need several more years of observation before changing their strategy. David Abelson said that when the Annual Report is released in June, staff will follow-up on this issue and maybe invite the geotechnical consultant to speak to the Board. David Allen asked if there was any correlation between movement and precipitation. Jeremiah said they are keeping an eye on this and is a standard part of their evaluation. Lisa Morzel said she would like to see charts showing the stabilization of the landfill area. Scott said one of causal factors was the west perimeter channel, and the problem with hillside stability, which de-stabilized that end of the landfill as it was collecting water in the subsurface. He said this is fixed now. Shirley Garcia asked what the role of the geotechnical engineer is now. Jeremiah said they review data, prepare information for the annual report, and consult on items of significance.

At the Present Landfill, the quarterly inspection was completed on August 27. No areas of concern were observed. The vegetation inspection was completed on August 19

## **Dam Breach NEPA Alternatives Analysis**

DOE is in the early stages of conducting NEPA analysis for the breaching of ponds A-3, A-4, B-5, C-2, and the Present Landfill pond. DOE prepared an Environmental Assessment on the first series of 7 dam breaches that were done recently. As part of the NEPA process, the public is invited to participate by identifying issues, concerns and alternatives to be considered. Input is being accepted through February 12. DOE will brief the Stewardship Council and the public at the April 5 meeting. The Draft EA will be released in May, followed by a 30-day public comment period.

Shelley Stanley asked DOE to clarify the public involvement process. DOE will be seeking input both at the alternative development phase and then on draft EA. David Abelson pointed out that this first opportunity for public involvement in the development of alternatives is not mandated. DOE is voluntarily adopting this step from the EIS scoping process. David Allen noted that the final step in the EA will be either a recommendation for an EIS or a Finding of No Significant Impact (FONSI). He asked if there would be any more opportunity for public input if a FONSI is issued. He was told there would not. Andrew Muckle asked if there is a problem the site is trying to solve through dam breaching. He was told that the primary purpose of the dam breaches is to return the site to pre-Rocky Flats conditions and also to reduce maintenance costs. The two proposed alternatives are, 1) Breach all five dams in two phases, and 2) No action. DOE is open to additional alternatives. David Abelson said that the Board will get more information about how these drainages work at the April meeting. David Allen stated that he does not think Broomfield is opposed to breaching dams as long as the data supports this strategy, but they feel that it is just too early to do this. He would like to know what criteria DOE will be looking at to make decisions on timelines, and the order of dams to be released. He also asked if they also will be looking at amending RFLMA. Scott Surovchak said RFMLA would have to be amended and that there will also be public process for this decision. In terms of the timing of the EA completion and a 'big picture' surface water plan, the 'big picture' plan will come first. The next proposed dam breach is not scheduled until March 2011.

## **Review Draft Washington, D.C. Talking Points**

In the coming months Board members and staff will meet in Washington, D.C. with Congress and DOE. To ensure that the message these members and staff will carry reflect the position and policies of the Stewardship Council Board, the Board would like to approve talking points for their meetings. Lisa Morzel moved to approve the talking points. The motion was seconded Clark Johnson. The motion passed 10-0.

## **Discuss State House Bill, 1127, Rocky Flats Visitor Information**

State Rep. Wes McKinley has reintroduced his bill requiring CDOT to post signs on non-federal lands adjacent to the Rocky Flats Refuge. The bill is the same one that died in committee in 2009. Chair Jeannette Hillery noted that the Stewardship Council has been committed to working in partnership to address these issues in discussions over the years. This Board is also interested in taking a position of 'informing' rather than 'warning'. She said if the Board felt it necessary to warn visitors to the Refuge of any significant dangers, it would not be waiting for this kind of legislative process to unfold. She explained that the Stewardship Council is working

on a new website to serve as a central point of information about Rocky Flats, and is also working with the Rocky Flats Cold War Museum. She said all parties agree there need to be signs; however the proper venue for making these decisions is in question.

Clark Johnson reported on a meeting that the City of Arvada arranged recently with Rep. McKinley. David Abelson was also invited and present. Clark said that he talked about the city's philosophical reasons for opposing the state legislature mandating these signs on federal land. To the Board, he noted that there is no current or imminent funding for allowing public access to the Refuge, which allows Rep. McKinley to engage on these issues, but also does not encourage USFWS to engage on this topic. He said Rep. McKinley tried to get Arvada to engage in discussing the wording of his bill, but that is not what they were looking to do. David Abelson explained that the Arvada officials made the point that even if they agreed with the text, they would still have trouble with this bill because of the inconsistency of the message that would be sending after they supported the cleanup efforts and development of the Refuge.

Lisa Morzel also met with Rep. McKinley. She pointed to a recurring cycle of Rep. McKinley attempting to bring forward this bill, and the Stewardship Council opposing it. Lisa does not see this as a productive use of time. She pointed out that that this bill does seem to have some momentum this time around. She volunteered to take the language in the bill and USFWS' approved sign language and try to find common ground and areas of agreement. She asked the Board not to take action at this meeting and give her some time to take a look at it.

Carl Castillo asked about the status of the language that the Stewardship Council worked on with USFWS. David Abelson explained that in the spring of 2006, USFWS initiated a process to develop entrance signs for the site. Several groups, including the Stewardship Council, submitted suggested language. USFWS selected the language, and issued a ROD for the entrance signs. The language can be found on their website. It does not align 100% with suggestions from this group, but is very close. The final decision on entrance signs has been made, but Steve Berendzen said that if there is basis for change, they would be open to having additional discussions. Also, there will be additional signs at locations within the Refuge. Shirley Garcia noted that the Refuge plan calls for the Cold War Museum to work with USFWS on additional signs. Andrew Muckle said that his understanding is that Rep. McKinley's desire is to close the Refuge to public access. Lisa Morzel said he did not say this in their meeting. She said she does think that he is willing to modify some of his wording. Jeannette said that, in the past, he has declined to meet with groups in between legislative sessions to discuss this. Lori Cox asked if Rep. McKinley was involved when USFWS developed the original wording. David Abelson said Rep. McKinley was in office at the time. Steve Berendzen said he did not recall any involvement. LeRoy Moore said that Rep. McKinley knows that USFWS has developed wording but he is not satisfied with it. Lori asked what kind of public process Rep. McKinley used to develop his bill. LeRoy said he used people who write language for the legislature and asked some parties who also do not support the USFWS language to help in his efforts.

Clark Johnson said he is skeptical that Rep. McKinley would look at an alternative approach during the session. Ron Hellbusch said he believes Rep. McKinley does not want the Refuge to open and that this is his long-term objective with this bill. Ron does not want to accommodate him on this path. Doug Young, from Senator Udall's office, said that one of the arguments he

has heard as a need for this strict language is that the cleanup was not adequate. He added that, years ago, Mark Udall urged the US Attorney to make all of the Rocky Flats grand jury materials available to EPA and CDPHE. Because this request was granted, the regulators have had access to all of the same grand jury information that Rep. McKinley saw when he served on the jury.

Sue Vaughan suggested a need to look at the goals of each of the parties, because agreement on the language for signs will never come if the goals cannot be reconciled. Megan Davis pointed out that the entrance signs have to capture a lot of information, and that codifying specific language can be dangerous. She said that they need to take some time to work on this. Clark Johnson moved that the Board take a position in opposition to HB 1127 as drafted. The motion was seconded Lori Cox. The vote was 8-2 in favor of the motion. Boulder and Boulder County voted in opposition to the motion. According to the Board's bylaws, nine votes are needed to pass a motion. Two parties were not in attendance. Jeannette noted that the vote does provide a sense of the Board on this issue. Lisa Morzel asked Board members to pass along any input to her and she will keep the Board informed about her efforts to identify areas of agreement on this topic.

### **Public Comment**

Hildegard Hix thanked Lisa Morzel for taking on the task of trying to find common ground on the sign issue. She said she disagrees that the State should not have a part in developing signs for the site. She thinks that state legislators should represent everyone, and that the USFWS does not have the full picture of information on this issue. She thinks they are coming from the viewpoint that the site is clean and safe, but she believes there are questions about this. She thinks that the signs should have information about both the history and a warning about dangers, and then let people decide for themselves if they wish to enter. She finished by asking Doug Young if the regulators ever looked at the Grand Jury data. He said he did not know.

LeRoy Moore said that the regulators did not look at material because US Attorney Suthers said there was nothing in the information that concerned the Rocky Flats cleanup.

### **NEW MEMBER INTERVIEWS AND APPOINTMENTS**

Lori Cox took over chairing the meeting since Jeannette Hillery was re-applying to serve on the Board. Lori explained that the process to be used was that the nine governments would interview candidates for the four community representative seats on the Board of Directors and then make appointments. The terms will start following the appointments. She said six individuals/groups submitted applications.

Lorraine Anderson was the first to be interviewed, via speakerphone. She gave an opening statement that explained her extensive background working on Rocky Flats issues. There were no questions for Lorraine.

Arthur "Murph" Widdowfield was the next applicant to be interviewed. He explained that he was retired, and looking for things to do. He said Rocky Flats is interesting, and that he has been around this area since the plant was built. His neighbor was a nuclear physicist, who was also

involved in fighting one of the fires at the site. Mr. Widdowfield did a lot of work at the site as a construction worker and contractor. He lives in unincorporated Jefferson County, close to Arvada. He saw ad in the newspaper for this position and decided to apply. Lisa Morzel asked if he has been to any Rocky Flats meetings before. He said he had not. She asked if he had an opportunity to read anything about this group. He said he had read the information on the website and gained a feel for what this group is doing. He said he has a lot of background with these kinds of issues. He owns some water rights, and knows a lot about water issues. His background is also in high-temperature systems, boilers, duct work, and plutonium incineration. He said he has confidence in the cleanup work done to restore Rocky Flats, and that he likes the fact that it is now a Wildlife Refuge.

Lori Cox announced that the 'Friends of Front Range Wildlife Refuges' withdrew their application from consideration. She asked if the Board had any questions for the incumbent applicants – The League of Women Voters, The Rocky Flats Cold War Museum and the Rocky Flats Homesteaders. They did not. Lisa Morzel reflected that they have four applicants with great experience, but that there is also something to be said for having a fresh look from someone who is new to the issue. She asked if it would be possible to add all of the applicants. Barb Vander Wall, the Board's attorney, said that the Board's membership is limited by the IGA, and therefore cannot add additional members beyond four.

Each government had four votes for the open positions. In the bylaws, it states that all nine governments may vote on the appointments of the non-governmental members. Superior, Jefferson County and Golden were not present for this vote, so six governments voted.

Westminster votes: Lorraine Anderson, plus all 3 incumbents  
Northglenn votes: Arthur Widdowfield, plus all 3 incumbents  
Boulder County votes: Arthur Widdowfield, plus all 3 incumbents  
Arvada votes: Lorraine Anderson, plus all 3 incumbents  
Broomfield votes: Lorraine Anderson, plus all 3 incumbents  
City of Boulder votes: Arthur Widdowfield, plus all 3 incumbents

After the first round of voting, all of the incumbent groups were voted in. Since there was a tie for the other open seat, the Board decided to wait until more voting members were present, and will therefore add this to the beginning of the agenda for the April meeting.

### **Election of Stewardship Council 2010 Officers**

Lori Cox, Bob Briggs, Lisa Morzel and Jeannette Hillery expressed their interest in serving as officers for 2010. Since the membership appointments were not completed, the Board decided to table this discussion until the April meeting as well. Clark Johnson moved to carry over the terms of the existing Board officers until the April meeting. The motion was seconded by Jeannette Hillery. The motion passed 9-0.

## **Updates/Big Picture Review**

**April 5, 2010**

### *Potential Briefing Items*

- DOE briefing on changes to water monitoring system
- DOE briefing on dam breach EA
- DOE budget briefing
- Continue discussing interpretive signs
- Update from Lisa Morzel on progress relating to Rep. McKinley's bill

**June 7, 2010**

### *Potential Business Items*

- Receive RFSC 2009 audit

### *Potential Briefing Items*

- Host LM quarterly public meeting (Annual Report)
- Continue discussing interpretive signs
- Begin discussing new website

The meeting was adjourned at 12:10 p.m.

*Respectfully submitted by Erin Rogers.*

The following article was published in Physics Today, September 2007

**The article** "Science-Based Cleanup of Rocky Flats" demonstrates a clear conflict of interest. For the record, the authors worked for Kaiser-Hill Co, the US Department of Energy contractor responsible for cleaning up Rocky Flats; their neutrality is suspect. Independent, scientific reviews of the cleanup have been written by contractors that neighboring municipalities hired, by a consortium of water users, and by DOE-hired experts.<sup>1-3</sup> All the reviewers expressed concern about the effectiveness of the remediation.

Plutonium dioxide is known to exist on the site as a finely dispersed solid. In that form it can be carried as part of a colloidal suspension in the groundwater. It will also be suspended in the air if burrowing animals bring it up from the contaminated rubble left on the site. Additionally, no independent evaluation has been conducted of the bedrock under the 10-square-mile site, which is in an earthquake zone. It is questionable that an area of this size will have no fractures in the event of an earthquake. Two unlined 20-acre, 40-foot-deep landfills were left on the site, covered by only a few feet of soil. Not only do they contain radioactive materials but also other carcinogens such as compounds of beryllium and volatile organic compounds that will eventually contaminate the groundwater.

Rocky Flats will be opened to the public for general recreation, and I shudder to think of children playing at this site. As a former member of the Rocky Flats Citizens Advisory Board and a chemist, I find this unacceptable. This isn't a cleanup, it's a cover-up.

#### References

- 1. GEI Consultants Inc, *Interim Measure/ Interim Remedial Action: For Groundwater at the Rocky Flats* (rep. prepared for the city of Westminster and the city and county of Broomfield, CO), Glastonbury, CT (10 February 2005).
- 2. S. F. Dwyer, *Review of the Original Landfill Closure Design, Specifications, and CQAP for the Rocky Flats Environmental Technology Site, Golden, Colorado* (rep. prepared for the Woman Creek Reservoir Authority), Sandia National Laboratories, Albuquerque, NM (23 May 2005).
- 3. Muller Engineering Co Inc, *Walnut Creek Drainages Pond Reconfiguration Review* (rep. prepared for the city and county of Broomfield, CO), Muller Engineering Co Inc, Lakewood, CO (28 March 2005).

**Anne Fenerty**

[anne@fenerty.com](mailto:anne@fenerty.com)

Boulder, CO

Regarding: **Rocky Flats Signage**

**To Rocky Flats Stewardship Council and Others To Whom It May Concern:**

I ask that this note be read at your meeting if at all possible.

I wish that I could be at this meeting to let you know how concerned I am over the prospect of bad signage at Rocky Flats. Having spent 15 years of my life trying to have Rocky Flats cleaned up to a safety standard that would protect the citizens living near this site, and for families that may visit the site, and failing, I now realize that I have failed in this endeavor. I am concerned that the dangers that still exist at this site be properly signed, so that those who want to visit the site do so with the knowledge of what still remains there.

I am not sure that determining the wording of the signs was ever supposed to be the job of this Council. However, I know how important it is to individuals to keep their jobs going and others to pad their résumés.

In the best interest of the public health and safety of the citizens, the wording/warning on the signs should come from those who know what really happened here, such as Rep.McKinley with the cooperation of the State Health Department.

Enough people have paid the price, with their bad health and deaths, for this sites existence and for the sake of the Almighty Dollar. Do not let any more people be negatively affected.

Thank you,

Samantha "Sam" Dixon

Former 16 year Council Person for the Westminster & Member of RFLII &RFCLOG

Please add this to the Minutes of this meeting held February 2, 2010 . Thank you

Statement in support of Rep. Wes McKinley's House Bill on Rocky Flats signage:

**RESEARCH:** Dr. H. Nichols was asked by ERDA/DOE official to research Rocky Flats (RF) airborne particles in 1974, contract awarded 1975-1976. **I noted deficiencies in air sampling equipment and found large numbers of radionuclide particles in fresh snow** **\*\*\*(see below)**. Reported to DOE, Gov. D. Lamm, Cong. Tim Wirth.

**1987 ON RECORD I QUESTIONED ROCKWELL (DOE CONTRACTOR): "DID YOU ROUTINELY EMIT SMALL QUANTITIES OF TINY PLUTONIUM PARTICLES FROM YOUR STACKS?" ANSWER: "YES"** ( CO HR sub-committee on Rocky Flats, chair Rep. Dorothy Rupert and Sen. Ruth Wright, 9/30/1987). Confirmation: History of RF plutonium emissions by **Dr. John Till** for CDPHE, **showed from official DOE data that over 600 million nanocuries of plutonium were emitted from the RF stacks during routine operations from 1952/3 to 1989. These were minimal estimates according to Dr. Till. N.B. EPA official at RF, Tim Rehder "A nanocurie is a massive dose" (p.c. 2000).**

*\*\*\* I conclude that the radionuclide particles I detected were plutonium, and the numbers greatly exceeded the J. Till total of over 600 million nanocuries; my estimates range up to tens of billions of plutonium particles per acre deposited across RF during routine operations.* Response to me from **Dr J. Till** at public meeting in Boulder, May 1, 2001: "Harvey, I believe your data." Witnessed by Dr. LeRoy Moore.

With help from offices of US Sen. Allard and Cong. Beauprez I got information about RF from EPA and US Fish and Wildlife Service (e.g. USFW letter 10/21/2003 to Cong. Beauprez) and learned that **I appear to be the only person ever to have sampled snowfall for radionuclides at RF, from which this current concern of mine arises.**

**SOIL SAMPLING:** DOE and Kaiser-Hill have analysed many soil samples at RF and maintain that plutonium levels in the Wildlife Refuge area are barely above "background" levels (i.e. from the atmospheric bomb tests of the 1950s/60s). NB the level of maximum radiological clean-up at the Refuge is 50 picocuries/gram, approx. 1000 times "background." **Professor Litaor** at Tel-Hai Academic College, Israel, former soil scientist at RF, stated that when he worked in the (future) Wildlife Refuge area in 1990 - 95 **"I commonly found that my personal protection equipment (PPE) was 'hot' by the day's end and was discarded into the 'hot' contaminated bin."** (p.c. letter March 23, 2004). **Dr. Litaor stated forcefully at a public meeting in Boulder in 2004 that from his direct experience at RF the scheme to allow recreation at Rocky Flats was "crazy."**

**PLUTONIUM EXPOSURE & HEALTH; & CHANGING "SAFE" LIMITS:**

DOE, Kaiser-Hill, and USFW say that the small amounts of plutonium still remaining in the Refuge area are no threat to public health. Throughout the 20<sup>th</sup> century the US radiation standards, originally regarded as safe, were repeatedly revised downwards, and we can expect this process to continue, as knowledge advances. "Safe" today may not

be judged safe tomorrow. Dr. Edward Martell of NCAR said that if he and Dr. Karl Morgan (founder of US health physics) were correct in suggesting that the US official radiological protection standards were too lax by factors of 100 or 1000, then there would be profound health consequences for exposure of the public to current “safe” levels of radiation (PBS Frontline TV program, 1993: “Secrets of a Bomb Factory”).

**A PRISTINE REFUGE?** The Colorado public has been told that the Wildlife Refuge is “pristine” (e.g. by DOE ecologist John Rampe, and RF spokesman Pat Etchart) but from the USFW there is acknowledgement that they do not regard the RFNWF as pristine: **“We have not referred to the Buffer Zone as “pristine” because we do not believe it to be so. Some areas of the Buffer Zone are publicly known to have very low levels of plutonium contamination; much of the Buffer Zone is also infested with exotic weeds. Since plutonium is not a naturally occurring element and these weeds are not native species, the Service does not consider the Buffer Zone to be pristine.”**( Oct. 21, 2003 USFW Regional Director letter to US Cong. Beauprez, forwarded to H. Nichols). I am concerned that at least one of our senior political representatives may have been influenced by this supposedly pristine status, and that may have colored his thinking about the matter at hand.

**PUBLIC PERCEPTION AND THE NEED FOR “INFORMED CONSENT:”**  
**Without full and frank language in the signage** Wildlife Refuge visitors would assume that a site certified for recreation by EPA and CDPHE and managed by USFW would be safe, unaware of the toxic and radiological history of the site and the contamination remaining there. It is the firm belief of myself and former Boulder County Commissioner Paul Danish that such DOE sites need a “special status” for the indefinite future to protect the public, until further research shows whether they are safe, or not.

I therefore ask that the Committee support Rep. McKinley’s bill for informational signage at the Rocky Flats National Wildlife Refuge.

Harvey Nichols, Ph.D.

Emeritus Professor of Biology.  
4255 Chippewa Drive, Boulder CO 80303  
tel. 303 494 2700  
Harvey.nichols@colorado.edu

# Rocky Mountain Peace and Justice Center

P. O. Box 1156, Boulder, CO 80306 USA 303-444-6981 Fax 720-565-9755 www.rmpjc.org

To: Rocky Flats Stewardship Council  
From: LeRoy Moore, Ph.D.  
Date: February 1, 2010  
Re: Statement for the public record

Please include the following two comments as part of the official record of today's meeting.

First, of 1,280 parties that commented on the Draft Environmental Impact Statement for the Rocky Flats National Wildlife Refuge,\* 81% rejected public access to the refuge while only 11% explicitly favored such access. This information is based on the official published record of comments on the Draft EIS.\*

Second, the Federal Advisory Committee Act requires that the membership of a body created to advise an agency of the federal government must "be fairly balanced in terms of the points of view represented" within the advisory committee. The Rocky Flats Stewardship Council, which advises the federal agency that funds it, was created in a way that deliberately bypasses this legal requirement. Is the Stewardship Council therefore an illegal entity?

\* U. S. Fish & Wildlife Service, *Rocky Flats National Wildlife Refuge, Appendix H: Comments and Responses on the Draft Environmental Impact Statement* (September 2004). I arrived at the total of 1,280 commenting parties by eliminating duplications, so that multiple individuals from a given organization, such as the Rocky Mountain Peace and Justice Center or the City of Broomfield, are in each case counted as a single party.