

Rocky Flats Coalition of Local Governments Board Meeting Minutes
Monday, August 5, 2002
8:30 – 11:30 a.m.
Mt. Evans Room in the Terminal Building
Jefferson County Airport, Broomfield

Board members in attendance: Hank Stovall (Director, Broomfield), Mike Bartleson (Alternate, Broomfield), Sam Dixon (Director, Westminster), Ron Hellbusch (Alternate, Westminster), Lorraine Anderson (Director, Arvada), Clark Johnson (Alternate, Arvada), Paul Danish (Director, Boulder County), Karen Imbierowicz (Director, Superior), Michelle Lawrence (Director, Jefferson County).

Coalition staff members and consultants in attendance: David Abelson (Executive Director), Kimberly Chleboun (Program Manager), Melissa Anderson (Technical Program Manager), Barbara Vander Wall (Seter & Vander Wall, P.C.).

Members of the Public: John Corsi (Kaiser-Hill), Dave Shelton (Kaiser-Hill), Rob Nagel (Kaiser-Hill), Allen Schubert (Kaiser-Hill), Lane Butler (Kaiser-Hill), Dyan Foss (Kaiser-Hill), Scott Surovchak (DOE), Rick DiSalvo (DOE), Joe Legare (DOE), John Rampe (DOE), Anna Martinez (DOE), Willow Mar (DOE), Robin Romero (USFWS), Mark Sattleberg (USFWS), Rob Henneke (EPA), Steve Tarlton (CDPHE), Kathleen Rutherford (CDPHE), Dan Miller (Attorney General Salazar), Patricia Rice (RFCAB), Bob Nelson (City of Golden), Doris DePenning (Friends of the Foothills), Doug Young (Congressman Udall), Kristi Pollard (Senator Allard), Lance Landry (Senator Allard), Roman Kohler (Rocky Flats Homesteaders), Anne Fenerty (Sierra Club), Phil Cruz (RFSOIU #1), Shirley Garcia (City and County of Broomfield), Al Nelson (City of Westminster).

Convene/Agenda Review

Chairman Dixon called the meeting to order at 8:40 a.m.

Business Items

1) Motion to Approve Consent Agenda – Paul Danish motioned to approve the consent agenda. Hank Stovall seconded the motion. The motion passed 5-0 (the City of Boulder was not present, and the Town of Superior abstained).

2) Executive Director's Report - David Abelson reported that his trip to Washington D.C. on behalf of the two Coalition grants - one from the Office of Long-Term Stewardship and the other from the Office of Worker and Community Transition (OWCT) - went well. Both offices are pleased with the Coalition work to date, and David expects secure funding from OWCT for the next two years. Second, David stated he had received the Site's monthly progress report and

cleanup continues to be ahead on schedule and scope as it has been for the past eight months, although the positive schedule variance had dropped slightly due to the dispute with South Carolina. Third, he provided notes from the Coalition subcommittee meeting with U.S. Fish and Wildlife Service (USFWS) which began the Coalition dialogue on development of the Site conservation plan. Coalition staff listed the following concerns: integration issues; water quality; wildlife habitat; access/public use; cultural resources; fire; mineral rights; internal refuge boundary; transportation corridor; and, contamination. USFWS will hold scoping meetings in four communities in September. Fourth, David addressed Barbara Mazurowski's statement regarding end-state discussions at the last Quarterly Stakeholder's meeting. She said the Site is at a point to make decisions and community input is needed because progress will soon overtake decision points. David said the end-state issues regarding surface cleanup, water quality, long-term stewardship, and buffer zone subsurface are fairly straightforward.

Lorraine Anderson said the Coalition needs to come together on an official position on end-state, and put forward a motion to have Coalition staff prepare draft language stating the Coalition position on these issues. Hank Stovall said he would second the motion. A discussion then ensued among Board members over the draft document, the term "revenue neutral", tradeoffs and prioritization, and a safe cleanup. Hank said Broomfield and Westminster drafted a document outlining their issues with the proposed end-state, and Sam Dixon had just distributed her revisions to that document prior to the start of the current meeting. He said the two cities' major areas of concern are subsurface cleanup, water quality, and long-term stewardship. He then cited the similarities and differences between their two drafts, and suggested Coalition staff should work out the differences in a Coalition proposal by September. David said the staff have already been working on a document and will have it to the Board for review by the end of the week. He said it should be ready for a vote by the September Board meeting. Paul Danish said his concern lies with DOE's track record over the past 50 years and his difficulty with their trustworthiness. He said a better course might be to tell DOE that the Site and the cleanup are theirs, instead of running the risk of becoming enablers of a bad cleanup. Sam, Hank, and Lorraine said it would be better to provide input and guidelines as opposed to leaving decisions wide open. Lorraine Anderson motioned to have the Coalition staff draft a document stating the Coalition's position on end-state issues. Hank Stovall seconded the motion. The motion passed 6-0.

3) Approval of Letter regarding plutonium shipments – David Abelson referred to the draft letter the Board requested at the July Board meeting. The Board was concerned about the amount of information in the public domain regarding plutonium shipments. Since then the Daily Camera ran a correction stating the information related to shipping routes they reported was pure conjecture. Also, Senator Allard had received a classified briefing from DOE, after a DOE official publicly stated shipments had started, and the Senator then publicly confirmed shipments to the Savannah River Site had begun. Additionally, David has come to learn that there is not consensus among the Board members on the information contained in the draft letter. A Board discussion followed, and initially Board members considered rewriting the letter to state concerns over the announcement of the movement of nuclear materials. David emphasized that the classified information is not being released, and this letter would not provide a specific

directive or request for members of Congress to act on. Kristi Pollard and Doug Young agreed with David and said they would be happy to respond to Board concerns, but it would not be of much substance. Kristi suggested the letter give a specific request, such as the enforcement of existing laws or stricter regulations. Paul Danish said the problem is the insouciant way DOE is treating information that should not be talked about in public, as if we were living in a time of peace. Michelle Lawrence said if it is the Board's intent to express our concern to Senator Allard and Congressman Udall, then they had accomplished that at this Board meeting. Michelle Lawrence motioned to not send the letter regarding plutonium shipments. Lorraine Anderson seconded the motion. The motion passed 5-1 (Boulder County cast the dissenting vote).

Public Comment

There was no public comment at this time.

End-State Conversation

Joe Legare (DOE) began by explaining the RFCA parties (DOE, CDPHE, and EPA) are trying to achieve, with these end-state discussions, a more unified approach to cleanup while reducing overall risk to the public, and not impacting project cost or schedule. He emphasized that this proposal is a way of defining the process and not the actual end of the cleanup decisions. This idea of end-state is based on the assumption that the resources already committed to this project are sufficient for a safe, compliant cleanup. However, under any cleanup scenario there will be residual contamination, institutional and engineered controls and the need for a robust post-closure stewardship plan. The RFCA parties current end-state proposal includes modifications to RFCA Attachments to achieve:

- surface soil to 1×10^{-5} wildlife refuge worker, a cleanup level of approximately 50 pCi/g plutonium;
- subsurface soil to 1×10^{-5} , including RCRA closures, through risk screening;
- modified surface water enforcement framework to reflect annual average onsite, 30-day average offsite, with no change in standards; and
- eco risk will be part of cleanup objectives, screening criteria, and risk analysis, with a health quotient < 1 .

Joe explained the open issues are characterization, the amount of remediation between three and six feet, subsurface instability, and the burrowing animal pathway. He stated the agencies will submit the proposed modifications to the RFCA Attachments in early September, with the 60-day comment period running September to October. Joe said the RFCA parties are seeking general endorsement from the communities of the overall end-state approach prior to the public comment period.

John Rampe (DOE) then described what DOE is planning for stewardship to ensure that the remedy is protective long-term. He noted they are not planning to push problems onto long-term stewardship, but controls will be required after cleanup, including institutional controls, engineered controls, and long-term monitoring and maintenance. John said stewardship

requirements can be made enforceable through Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), the Record of Decision (ROD), and possibly a post-RFCA agreement. He then explained institutional controls will be required in the Industrial Area and parts of the Buffer Zone, and could include prohibitions on excavation, drilling wells, and activities that would interfere with engineered controls or water management. These controls would be identified in the Memorandum of Understanding (MOU) with USFWS. David Abelson questioned the enforceability of institutional controls, and asked about DOE's conversations with EPA and CDPHE regarding the Agencies' enforcement roles post-closure. John said the Agencies met last week and anticipate an enforcement model similar to the current RFCA, combining CERCLA, RCRA and Colorado Hazardous Waste Act (CHWA) in an enforceable document. John said the State would then have an enforcement role through CHWA. However, EPA's role is still open since DOE will become the lead agency after closure under CERCLA. Rick DiSalvo (DOE) added that EPA would still be the lead agency in reviewing DOE's five-year reviews. Dan Miller (Attorney General Salazar) said an interagency agreement combining CERCLA and CHWA/RCRA would also be enforceable by citizen groups. The applicability of the State covenants bill has not yet been resolved. Dan also said the dispute between the Department of Defense and EPA over post-ROD authority is still ongoing, but how it is resolved could very well impact how Rocky Flats' post-closure documents look.

John discussed monitoring and maintenance and said this will include enforceable points of compliance, performance monitoring to ensure the effectiveness of the remedy, and maintenance of the remedy. Specific locations and maintenance types will be identified in the final ROD/post-RFCA agreement. Next, he described the periodic review of the remedy, possible review scope, frequency of the reviews, public role, and oversight by other agencies. An example of review scope includes:

- adequacy of institutional and physical controls
- performance and condition of engineered controls
- review of Site environmental data
- delineation of jurisdiction and responsibilities between DOE and USFWS
- changes in risk assessment guidance
- advances in monitoring and cleanup technologies
- effectiveness of information management
- contingency plans and emergency response
- changes in surrounding land and water use

John noted open stewardship issues are long-term funding, a DOE presence onsite, and enforceability. Currently DOE is working on several documents incorporating long-term stewardship, including a stewardship section proposed for RFCA Attachment 5 (early September 2002), the Rocky Flats Long-Term Stewardship Strategy (December 2002), MOU with USFWS (December 2002), and the final ROD/post-RFCA agreement (circa 2005).

Hank Stovall referred to changes in risk assessment guidance under the remedy review and asked if this would include changes in surrounding land and water use. John replied if there are changes in factors such as slope factors or epidemiology they would want to make sure the remedy is still protective, but they have no plans to change offsite water standards. Lorraine Anderson said there should be some type of agreement or procedure for surrounding communities to have the ability to reopen discussion of a remedy if triggered by local water or air sampling. John said they are certainly open to discussion on that point. Sam Dixon was concerned about water quality and annual averaging not finding contamination before it leaves the Site. John explained they will look at the data on a monthly basis to look for early warning signs, but the data is averaged over 365 days. Paul Danish questioned who would review sampling results locally since the Coalition would most likely not exist after cleanup. Ron Hellbusch said the Woman Creek Reservoir Authority is ongoing. Paul said if local governments are involved in long-term stewardship there should be some type of intergovernmental agreement. David said local governments would not have liability, but should still have some type of mechanism to review data on water, air, and remedies post-closure. Sam questioned the frequency of reviews and John said the remedy itself may prescribe the timing of reviews.

Present Landfill Remediation

Dyan Foss (Kaiser-Hill) began by describing the Present Landfill's history. The 20-acre sanitary landfill was used from 1968 to 1998, at which time it was covered and seeded. During the operational history the Site disposed of primarily municipal type waste, some hazardous waste streams, combustible materials, PCBs, asbestos, and sewage sludge. In 1974 a groundwater interceptor system was installed around the perimeter of the landfill, and in 1982 two soil-bentonite slurry walls were installed on the northeast and southeast ends of the landfill. A leachate/seep interceptor and passive treatment system was installed in 1996 and modified in 1998. Water discharging from the treatment system meets all surface water action levels, except for benzene on an intermittent basis.

Dyan next explained landfill closures. In accordance with CHWA the presumptive remedy for landfill closure is a cover. A presumptive remedy is a technology that EPA believes, based upon its past experience, generally is the most appropriate remedy for a specified type of site. A presumptive remedy, when available, will be used for all CERCLA sites except under unusual circumstances. Additionally, Attachment 10 of the RFCA indicates that the Present Landfill will be closed in place through the placement of a cap/cover. David Abelson asked under what type of circumstance a presumptive remedy would not be considered appropriate. Dyan said this happens primarily when ground and surface water issues can not be controlled and waste must be removed. Steve Tarlton (CDPHE) said the general presumptive remedy for waste is a cover, but there can be other remedies for water issues.

Dyan said because the Present Landfill is a RCRA interim status unit, a Subtitle C equivalent cover will be constructed. She then presented a cross-section diagram showing cover construction of a Subtitle C cover and an evapotranspiration (ET) cover. The Site is proposing to

use an ET cover for the Present Landfill since studies have shown the Subtitle C cover does not work as well in arid environments and the two covers have an equivalent performance. The ET cover can have up to approximately eight feet of soil over a gas venting layer and a biota barrier. The goal is to have the soil hold water until plants transpire the moisture, keeping it from infiltrating the waste. Although this cover takes longer to mature, there are no man-made elements so the lifetime is expected to be indefinite.

Dyan explained an Interim Measures/Interim Remedial Action (IM/IRA) document is being prepared to address the closure of the Present Landfill, since it is considered an interim status unit. The IM/IRA will only address the implementation of the cover and not the groundwater remedy, although groundwater monitoring requirements will be included in the IM/IRA. She said the decision for the treatment of the leachate seep on the east side of the landfill will continue to be addressed in accordance with the Proposed Action Memorandum (PAM) for the passive system. The PAM may require a minor modification to address changes to the treatment system, but based on previous monitoring efforts it is not clear if a groundwater action will be required. Dyan stated there are inconsistencies in the chemistry of the contamination in the groundwater east of the landfill pond dam and the contamination in the seep. The Site believes it is possible the PU&D Yard plume may intersect the landfill, thus they will be reviewing groundwater geochemistry and hydrology data from the last sixteen years. Additionally, an investigation is being conducted of the current groundwater interceptor system to determine how well it is functioning.

Paul Danish questioned the lifetime of the groundwater systems, and Dyan confirmed they do have a finite lifetime. Lorraine Anderson asked if they would look at data from the landfill. Dyan replied they are doing a hydrologic study of the area, there was the Site Water Balance Study and modeling, and there is also data from groundwater wells. They will review all this information together along with a review of the groundwater systems themselves. She said the Site Water Balance Study determined that most of the infiltration was from infiltration through the interim cover. Ron Hellbusch asked about the depth of the slurry walls, and Dyan responded they go down to bedrock. Hank Stovall asked how they would validate the ET cover is working as designed. Dyan said they have modeled the cover based on site-specific data, and will place performance monitors under the soil layer to verify if it is working. Monitors may include nested-center monitoring, lysimeter, and soil moisture probes. Hank said it is important to incorporate sufficient redundancy.

Paul asked if they monitor for VOCs and PCBs. Scott Surovchak (DOE) said they initially monitored for PCBs but never saw any. Paul asked how the landfill was filled and if it is conceivable to find waste from specific years. He said he was asking because Rockwell denied the presence of PCBs and then it turned out there were indeed PCBs present. Thus, if there was a cover-up, PCBs may have been disposed of by being tossed into the landfill. Paul said if they could correlate the year that happened with the location in the landfill, then perhaps they could selectively remove serious contamination without removing the entire landfill. Scott said PCBs are not particularly mobile, but they still should have seen them in older waste streams if they were there, but they did not. Paul questioned if future contaminants would actually be limited to

what is being found now. Joe Legare said groundwater sampling is a reliable indicator of contamination source, especially with over 30 years of sampling. He also said the landfill was regulated with procedures about what goes into it. Scott emphasized that by cutting off infiltrative water they would immobilize anything in the landfill. Sam Dixon asked how long of a history of use the ET cover had. Dyan said it had only been tested for ten years. Sam said there was no assurance it would not fail, and Dyan again said there were no man-made materials within the cover to fail. Joe added a performance review would be included in the CERCLA Five-year reviews. Steve said if they had seen something serious in the landfill with an identifiable source then it would make sense to remove that source, but they are not seeing that now. He also said that even if they did remove a discreet source it still would not change the remedy for the rest of the landfill.

Dyan said the 60% Design document is scheduled for completion in September. She listed the following changes in Design Direction from the Conceptual Design to the 60% Design:

- The asbestos will not be relocated and the waste in general will not be disturbed.
- The ET apron concept will not be pursued and instead the existing seep treatment system will be extended to the new slope surface.
- A minimum of four feet will be proposed for the cover (may be thicker based on modeling results).
- The ET cover will only be placed over the waste.
- The ET cover will have slopes from three to five percent.
- Side slopes (not over the waste) will be designed for slope stability and erosion protection.
- The pond will definitely be impacted, and may be eliminated completely.
- The biota barrier will be included and a gas venting layer may be included depending on the cover soil evaluation.

Lorraine asked about the current purpose of the pond. Dyan said it retains water from the seep, but they would not need to retain water if meeting surface water criteria. Currently the water is pumped to an A-series pond. Paul asked about the asbestos, and Dyan said it is in two discrete cells and is from when the Site was remodeled and not from the time of the fires. Dyan also said one open issue is finding a suitable soil source to use as part of the ET cover as the Lafarge soils have not performed adequately in the modeling efforts.

Finally, Dyan discussed long-term stewardship and stated a robust monitoring system has been outlined in the IM/IRA and will be finalized in the design. She said the IM/IRA has a stewardship evaluation which was developed with the assistance of the Stewardship Working Group, and considers access controls and land use restrictions, monitoring and maintenance, recordkeeping and documentation, and reporting. Hank asked who is designing the cap, and Dyan said Earthtech. She said the IM/IRA will be out for a 45-day public comment period starting August 6th.

David asked the Board if they had any issues with this proposed remedy that staff should be aware of in order to prepare comments. Paul said the potential for serious problems in the future is a real possibility and listed a host of concerns including remedy failure, soil stability, and the true contents of the landfill. Lorraine said continuous monitoring of the leachate is important, as well as performance monitoring and confirmation of erosion potential. Karen Imbierowicz said assurances and confirmation the cover is functioning and keeping water out is important, as well as a remediation plan if unknown contaminants do begin to leak. Hank asked if the State has a responsibility to monitor, and Steve said the CHWA requires monitoring, and DOE would also have to do performance monitoring a minimum of 30 years. Lorraine said monitoring should be enforceable. Sam said characterization to determine contamination source and pathways would also be necessary.

903 Pad Remediation

Lane Butler started with a description of the 903 Pad and its history. The area was used for outdoor storage of drums containing oils and solvents contaminated with uranium and plutonium from 1958 to 1967. Approximately 420 drums leaked into the soil and then contamination was redistributed during drum removal activities. An asphalt pad was constructed over the contaminated soils in 1969. The Pad is not to be confused with the 903 Lip Area, also located in the Buffer Zone, which received deposition of windborne and storm water transported radioactive contamination from the Pad area. Three different attempts were made to remediate the Lip Area in 1976, 1978, and 1984, and 5.4 acres were covered with six inches of artificial fill for stabilization. The remainder of the Lip Area contains undisturbed surface soils. Lane clarified that the ER RSOP Notification for the 903 Pad only addresses remediation of the radiological contamination directly under the Pad. VOC contamination will be addressed in the IM/IRA for the Lip Area, which will not be ready until next summer. He explained this approach will provide a way to move ahead in removing the source area without predetermining the remedies for the adjacent areas.

Lane said 903 Pad characterization results indicate radiological contamination is mostly confined to the top one foot of native soil beneath the asphalt/gravel base. Tier I radiological exceedences were only observed in the upper zero to twelve inches of soil below the asphalt/gravel base layer. No samples collected in soil beneath twelve inches exceed Tier II radiological action levels, with the maximum concentration detected at 48.4 pCi/g. Lane stated fifteen boreholes were sampled to investigate VOCs at the 903 Pad, and no significant VOC contamination was detected in the upper twelve inches of native soil. Thus, the remediation objective is to remove radionuclide contaminated soils beneath the Pad and address VOC contamination under the 903 Lip Area IM/IRA. The ER RSOP Notification is scheduled for a 30-day public comment period August 2002, and remediation work is scheduled to begin October 2002.

Lane then described the planned remediation which will be performed inside two moveable weather tents. They will segregate and package the asphalt for disposal as low-level waste, and then excavate the gravel base and native soil to one foot beneath the gravel base in consultation with the regulatory agencies. The gravel and soil will be disposed of as low-level or low-level-

mixed waste. Confirmation samples will be collected for onsite analysis to verify cleanup levels. Once excavation is complete they plan to backfill with clean soil, and place topsoil, seed and hydromulch in the disturbed area. Lorraine Anderson asked when wind conditions would be considered, and Lane replied remediation would stop after two consecutive 30-minute periods of winds at 15 mph. Lane also described general plans for air and surface water monitoring.

Ron Hellbusch asked where the five surface water monitoring stations would be located in relation to the South Interceptor Ditch. Lane said they would be above the ditch. Karen Imbierowicz asked if there was a buffer built into the twelve inches of soil to be removed. Lane stated they will not stop excavating blindly at twelve inches, but using confirmation sampling and regulatory consultation they would go after contamination. David Abelson asked if twelve inches would be removed uniformly from under the pad. Again, Lane said they would use the consultative process and remove the entire contaminated area. He also confirmed they are treating this as surface soil even though they are going down one foot. Lane said they have 99.99% confidence in the decay rates, ratios, and accuracy of their field instrumentation. David said the document states a cleanup to twelve inches, but is it their commitment to clean to a level of 50 pCi/g? Lane said that although cleaning to 50 pCi/g is their intent, legally they could not state that cleanup level since they do not yet have a new document, and the current RFCA lists a tiered approach with an action level of 651 pCi/g. Steve Tarlton confirmed it is also the State's intent to achieve a cleanup of 50 pCi/g throughout the entire Pad area.

Round Robin

There was no further Board comment.

Public Comment

There was no further public comment.

Big Picture

David Abelson reviewed the Big Picture. At the September meeting the Board will focus on the Water Balance Study and the Original Landfill. The Board will also consider the Coalition end-state document.

The meeting was adjourned by Sam Dixon at 11:32 a.m.

Respectfully submitted by Kimberly Chleboun, Program Manager