

Rocky Flats Coalition of Local Governments

Boulder County City and County of Broomfield Jefferson County
 City of Arvada City of Boulder City of Westminster Town of Superior

Rocky Flats Coalition of Local Governments Board Meeting Minutes

Monday, August 4, 2003

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), Tom Brunner (Alternate, Broomfield), Mike Bartleson (Alternate, Broomfield), Lorraine Anderson (Director, Arvada), Clark Johnson (Alternate, Arvada), Nanette Neelan (Alternate, Jefferson County), Matt Magley (Alternate, Superior), Amy Mueller (Alternate, City of Boulder), Paul Danish (Director, Boulder County), Jane Uitti (Alternate, Boulder County), Sam Dixion (Director, Westminster), Ron Hellbusch (Alternate, Westminster).

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: Dave Shelton (Kaiser-Hill), John Corsi (Kaiser-Hill), Bob Davis (Kaiser-Hill), Dyan Foss (Kaiser-Hill), Lane Butler (Kaiser-Hill), Karen Wiemelt (Kaiser-Hill), Denny Ferrera (Kaiser-Hill), Patrick O'Keefe (Kaiser-Hill), John Rampe (DOE), Karen Lutz (DOE), Laurie Shannon (USFWS), Mark Sattelberg (USFWS), Tim Rehder (EPA), David Krucke (CDPHE), Carl Spreng (CDPHE), Marion Galant (CDPHE), Patricia Rice (RFCAB), Jerry Henderson (RFCAB), Shirley Garcia (Broomfield), Al Nelson (Westminster), Bob Nelson (Golden), Devin Granbery (Superior), Doug Young (Rep. Udall), Alison Flowers (Senator Allard), Kristi Pollard (Senator Allard), Kim Cadena (Rep. Beauprez), Representative Bob Beauprez, Phil Cruz (RFSOIU #1), Sandy Dazzio (Wackenhut), Roman Kohler (Rocky Flats Homesteaders), Karen Hollweg (citizen), Margaret Boyd (Boyd Solutions), Paula Eloffson-Gardine (EIN).

Convene/Agenda Review

Chairman Lorraine Anderson convened the meeting at 8:44 a.m.

Business Items

1) Motion to Approve Consent Agenda - Paul Danish motioned to approve the consent agenda. Ron Hellbusch seconded the motion. The motion passed 6-0 (Jefferson County was not yet present).

2) Executive Director's Report - David Abelson reported the following items:

ADMIN RECORD

- The Coalition's quarterly finance report is available.
- Rocky Flats' plutonium packaging is complete and shipments may be complete by late August. When shipments are complete Rocky Flats will no longer be a nuclear site, the Protected Area will close, and approximately 300 workers will lose their jobs.
- Board packets contain all of the Coalition government letters sent regarding refuge planning. Paul Danish said Boulder County will be issuing their letter within a week. Laurie Shannon also provided a new USFWS planning update handout.
- Representative Udall has introduced his minerals credit bill. David will be meeting with staff from Reps. Udall and Beauprez and Senator Allard's offices and mineral holders to discuss the path forward in resolving the issue of acquiring mineral rights.
- As previously reported, in May there was a fire in a glovebox in Building 371. The Defense Nuclear Facility Safety Board is investigating and a rumor suggested the DOE Inspector General may also investigate, in addition to the Site's internal investigation.
- The 903 Pad cleanup is 60% complete and the Site is generally finding contamination where expected, although there have been instances where contamination was at depths and levels not expected. On July 16th soil was removed from a known hotspot and a sample tested. The result was about 1800 nanocuries per gram (nCi/g) of americium, on the order of 10,000 nCi/g of plutonium; contamination was an order of magnitude greater than expected. David added that only 4% of the intermodals containing excavated dirt have been below 50 picocuries per gram, the radionuclide soil action level. The calculated amount of plutonium in the intermodal exceeded the waste acceptance criteria for low level waste (LLW) going to Envirocare, and was actually considered TRU waste. The dust suppression systems worked very well, with no alarms triggered, and the incident was not a major health risk. However, the Site stopped work when they realized the soil was not LLW.

David said he is troubled by Kaiser-Hill's action subsequent to this event. Currently, per the 903 Pad RFCA decision document, Kaiser-Hill must strip off asphalt, gravel, and 12-inches of native soil, take five samples from the cell, and remediate further if necessary. They are now proposing to take those five samples before any soil excavation (after asphalt and gravel removal), then decide if they need to remove the top foot of soil. Kaiser-Hill is also looking to change the soil put-back levels by backfilling with excavated dirt if it is less than 50 pCi/g, and lowering soil contamination levels by blending down. He said these proposals are still preliminary and under review, but he is skeptical of them considering that the RFCA parties just spent two years determining cleanup levels and now Kaiser-Hill wants to change how they sample and potentially remove less soil contamination, while at the same time DOE will not issue details of long-term stewardship. Time was limited as Rep. Beauprez had arrived, so Kaiser-Hill's response was postponed until later in the meeting.

Representative Beauprez

Representative Bob Beauprez visited the Coalition and discussed Rocky Flats as well as transportation infrastructure, the economy, and natural gas supplies.

Rep. Beauprez began by stating the last of the plutonium is about to be shipped offsite, which is good

news, but a level of vigilance is still warranted. He used the example of the closure and cleanup of Lowry Air Force Base to illustrate how the federal government had good intentions in their cleanup efforts, but the contamination turned out to be greater than imagined. Although cleanup must proceed, the challenge is enormous since there are approximately 9000 sites like Lowry nationally as the federal government has been the biggest environmental violator in the nation. He noted that part of the problem at Lowry is the expectation of transition to residential use, which has the highest cleanup standards. Rocky Flats and the Rocky Mountain Arsenal transitioning to refuges is a more reasonable standard and more achievable.

Rep. Beauprez said there will still be a level of concern in the future over the potential for finding unexpected contamination, like the buried incinerator. He said it is important to make sure the federal government is held accountable and the Site is as clean as they said it would be. Rep. Beauprez emphasized that he is not trying to cast negative aspersions on DOE as he knows they are trying to do a good job, but a bureaucracy is a bureaucracy. He added that DOE has a good partner in Kaiser-Hill, and he suggested the Coalition listen closely to their competent professionals and good scientists. Rep. Beauprez stated all of the generations of Rocky Flats workers, from cold war to cleanup, have done their job and deserve a pat on the back.

The Congressman then discussed transportation infrastructure appropriations, seeing positive signs for economic recovery, and the economic importance of finding a way to safely harvest natural gas and increase reserves.

Paul Danish said turning Rocky Flats into a national wildlife refuge solves a host of problems but also may create others since accepting cold war legacy sites is not a big part of USFWS' mission. He noted that many of these legacy sites are becoming wildlife sanctuaries, and wondered if Congress could recognize the reality that these sites cannot be managed as typical refuges in terms of funding. Paul also suggested creating public policy which would limit human access. Rep. Beauprez said end-use of a site, including access, should be driven more locally than federally, and local expectations should be reasonable due to financial and time constraints. He suggested citizens monitor the cleanup as it moves forward, stay on top of expectations, and determine how to hold the federal government accountable after cleanup. Paul stated that the local governments realize that cleanup to level they would like is not possible, thus they must ask the government to remain responsible and accountable for what is left. Lorraine Anderson said Congress should keep in mind that each site is unique and one size does not fit all, and decision should be made locally. She also agreed with Paul's concern that USFWS may not have enough money to manage the refuge.

Hank Stovall stated the local government elected officials' primary concern with Rocky Flats is health, safety, and welfare, and the main mission is to reduce contamination to the extent feasible. However, he is also concerned about closure's economic impact on western metropolitan Denver since there will be no further economic development at the Site. He cited workforce reductions in several local companies and the billions of dollars that will be lost if and when Rocky Flats workers leave the area. Hank asked if there is any potential for backfilling some of the jobs lost here by transferring a federal facility via

decentralization to the western metro area. Rep. Beauprez responded that he does not foresee a mass redeployment, but he believes there will be growth in what is already here. He listed the examples of Buckley Air Force Base, redevelopment of the Federal Center, Fitzsimmons Medical Campus, the federal transfer of contract to Lockheed Martin, and potential security needs at Denver International Airport. He also said Len Martinez with Kaiser-Hill is working aggressively with private and public agencies to place workers locally. Rep. Beauprez said that in a generation the next Colorado employment wave may be in bioethics research, biomedical manufacturing, and nanotechnology, and people must be willing to be flexible, adaptable, seek education, and change jobs.

Phil Cruz raised three issues: potential reduction in funding under the Section 3161 benefits program for DOE veterans; helping guards find jobs locally, and finding jobs within the Office for Homeland Security; and, the incredible delay in workers receiving benefits or in being notified of eligibility under the Energy Employees Occupational Illness Act Program. Rep. Beauprez said his Deputy District Director, Marge Klein, would investigate and communicate back on these issues. He stated there has been frustration for everyone on the Homeland Security jobs issue, partially because distribution of funds already appropriated has not been timely enough. He acknowledged the Office has miles to go before it will be working as well as it should. Rep. Beauprez added that part of the reality in finding jobs is that although there are good paying jobs available, not everyone may get the same kind of compensation or stay within the same job field if they are intent on staying here.

David Abelson returned to the issue of holding DOE accountable and explained the Board had just approved a letter regarding its dissatisfaction with DOE's planning for long-term stewardship. He said at some point this issue may require involvement from the Colorado Congressional delegation. Rep. Beauprez said this type of issue would be an appropriate place for them to become involved, and he would be glad to assist.

David also described the issue of the disposition of low-level waste, and the recent report from the DOE Inspector General on the necessity of finding a disposition pathway for this waste stream. There is concern over the potential compromise to cleanup and increased expenditures. Rep. Beauprez asked the Coalition to stay in close contact and he would be as facilitating as possible to the efforts to resolve the problem.

Present Landfill

Melissa Anderson gave a brief history of the Present Landfill. Bob Davis (Kaiser-Hill) then described current conditions and the Site's closure strategy. The landfill is structurally and environmentally stable, with no major subsistence or erosion. All surrounding groundwater flows into a seep and pond, and is not impacted by the landfill as shown by fifteen years of monitoring. The seep has limited impact from the landfill and meets maximum contaminant levels and generally meets surface water standards, although it sometimes hovers above the standards for benzene, barium, and zinc. Bob provided a diagram showing a conceptual flow model routing groundwater around the landfill.

Bob stated that the regulatory closure strategy for Individual Hazardous Substance Site 114 (which includes the landfill, pond, and surrounding spray field area) meets the substantive requirements under CERCLA and the two key Applicable or Relevant and Appropriate Requirements (ARAR). Since the last Interim Measure/Interim Remedial Action (IM/IRA) was drafted, EPA and CDPHE also now require that the cover meet an infiltration limit of 1.3 millimeters per year. The Site will also implement the de-listing process of the seep as it is a hazardous waste listed with the State. Bob confirmed that even if the seep is de-listed, it would still be subject to monitoring and periodic review.

Bob then reviewed potential cover alternatives: evapotranspiration cover, which relies heavily on vegetation that could take five years to establish and would require 150 trucks of soil a day for six months; soil cover, which is only a few feet thick and would not meet some of the requirements; and, the geosynthetic composite cover, which has been chosen as it will best meet all requirements. The geosynthetic cover consists of the following layers:

- geosynthetic clay liner, consisting of cloth between layers of bentonite, over the surface of the landfill;
- flexible membrane liner;
- drainage net which allow water to flow off, which replaces the foot of sand in a standard RCRA cover;
- soil cover, one to two feet deep; and,
- cobble surface, with cobble ranging in size from eight to twelve inches.

Hank Stovall asked how the cover would be installed. Bob explained the geosynthetic clay liner comes in rolls, which would be rolled out manually and overlap. The flexible membrane liner comes folded up in 200-inch by 200-inch squares, which would also be placed by hand. Each piece is tested in the lab and field. The drainage net is also placed by hand, but the soil and cobble layers would be placed mechanically, with low-pressure bulldozers in a stair step fashion. Ron Hellbusch asked about a warranty period for the materials, and Bob said the materials are warranted for thirty or more years, but inspections show it to be highly resilient when protected from the sun and chlorinated hydrocarbons. Paul noted there is benzene present, and although levels are low now they still don't know for sure what is in the landfill. Jane Uitti asked about the predictability of the liners expanding uniformly. Bob stated the lines are very predictable and they don't foresee any problems with moisture. Lorraine Anderson asked if animals could burrow into the cover, and Bob said the mixed cobble size would prevent burrowing.

Paula Elofson-Gardine asked what would keep the layers from slipping in the event of a torrential rain. Bob said the cobble should prevent movement, erosion or differential settling, and there is slippage-lined materials built into a trench all around the landfill to anchor materials. Melissa Anderson asked how they would validate infiltration requirements and general performance. Bob said a cover is the presumptive remedy for hazardous waste landfills, and there would be quality assurance/quality controls installed. If the cover is built correctly the seep would decrease over a year or so. Karen Hollweg asked if they couldn't reverse the soil and cobble layers to allow for vegetation. Bob explained that a root system requires three to six feet depth, thus roots would grow laterally, competing with other plants, resulting in noxious weed problems. Shirley asked if the landfill was now closing under only CERCLA, and Bob said RCRA is one of the ARARs.

Bob then described the seep management strategy, and said the seep will likely require no further action. The Site will then progress toward completing the State's hazardous waste delisting. He added that the passive treatment system would remain in place until it is delisted. Closure monitoring will include cover inspections and monitoring the seep. Paul asked if the Site knew how the benzene was stored in the landfill. Bob said they suspected rags coated in solvents, and not barrels of benzene, but

they had no evidence either way. Lorraine asked about ground penetrating radar, and Bob said it would not be able to detect barrels within the construction waste. However, he added that the key to understanding the landfill content is the fifteen years of groundwater data showing very little material impacting the environment.

Hank asked about the timeframe difference between completing the cap and delisting the seep. Bob said the delisting should be complete this year, and the cap by this time next year. Hank asked what would happen if the seep is prematurely delisted and something else shows up. Tim Rehder (EPA) explained the remedy as a whole would still require long-term monitoring. John Rampe (DOE) said DOE would still be responsible for monitoring and ensuring the remedy remains effective for the long term. If concentrations were to increase then DOE would be responsible for making the necessary fixes. Hank asked if EPA or CDPHE would coordinate with DOE on the long-term monitoring. Tim replied that EPA must sign-off on the Five-Year Review, which may actually occur more frequently. Lorraine said her concern was the notification process and making sure the communities are informed of any potential contamination issues. John confirmed that DOE would notify regulators and communities if levels were to exceed standards.

Paul urged caution before delisting, and Bob agreed and explained that delisting is based on comparing the seep's contaminant levels to standard maximum contaminant levels (MCL). He noted that the water coming out of the seep is already way below the MCLs. Paul raised the broader issue of seeing a general pattern during cleanup, and it seems that when the Site encounters something not anticipated, they resolve the problem by changing cleanup levels. He said it has troubling implications for long-term stewardship and error recovery if something goes wrong in the future. David agreed and added that the Site still does not know their monitoring scheme for the landfill post-closure. He suggested they develop long-term plans while Kaiser-Hill is still onsite. Melissa asked about specific long-term stewardship requirements, and Bob reiterated that the cover and seep will be monitored and inspected, plus the EPA periodic review every five years. He said he couldn't make assumptions on behalf of DOE, but these are standard requirements for any landfill and he expects these requirements, at a minimum, to be in the IM/IRA. Bob concluded by stating he expects the final IM/IRA to be available for regulator and stakeholder comment by the end of August, cover design plan by January, and construction to begin by April 2004.

Remediation of South Side

Denny Ferrera (Kaiser-Hill) reviewed progress of the Remediation, Industrial Decommissioning, and Site Services (RISS) Project, also known as the South Side Strategy. He outlined the area on a map reflecting the areas completed, in progress, and scheduled. The scope of the project includes industrial facility decommissioning (D&D), environmental restoration (ER), site services (maintenance, utilities, emergency operations, property disposition), and analytical services. To date, 211 of 600 plus structures have been demolished and 168 of 359 ER sites have been closed. The project strategy involves dividing the project into five areas and is designed to provide large areas to the ER group for remediation and initial grading. Early ER will allow them to get ahead of their work scope in the anticipation that the plutonium buildings will all be coming down at the end of FY05. All of the major RISS facilities will be decommissioned before Buildings 371, 776, and 707.

Denny then reviewed the specific facilities decommissioned and ER projects completed or in progress. Recent D&D highlights include: demolition of 14 facilities; completed vegetation of the 280 and 900 Areas; pre-demolition survey of B865; removal of 41 of 138 gloveboxes in B559, making the facility criticality incredible; and, removal of the ventilation system in B444, the beryllium shop. Lorraine

asked what other buildings are still criticality credible, and Denny replied B371 and B707. Denny also listed ER highlights which include: 61% completion of 903 Pad remediation; removal of ash pits hillside concrete and discovery of the incinerator; under building sampling of B371/374, B771/774, and B444; 904 Pad removal; and, completion of Solar Ponds remediation. Paul Danish asked if the 904 Pad was similar to the 903 Pad, and Denny said no, the 904 Pad had a pad down and tents over the drums to prevent any spread of contamination.

Denny next described the decommissioning and independent verification of B865, the next major building to be demolished in this project. The upper portion of the facility has been decontaminated to unrestricted release and will be demolished in accordance with the Facility Disposition RSOP. Approximately 25,000 square feet of the High Bay has fixed uranium/beta contamination on the slab and in cracks, and will be dispositioned in accordance with the ER RSOP. DOE conducted independent verification of the pre-demolition, and demolition is scheduled to begin August 25th and be completed by September 29th. The independent verification was conducted by ORISE and found generally acceptable results with areas for improvement in the survey process. Paul was troubled by the independent verification team's statement, "Based on the experience of the independent verification team, it is not uncommon to find residual contamination at a project of this magnitude. This is not an abnormal occurrence and in fact the independent verification team has had the experience of verifying sites with greater contamination at the final survey stage." Paul said it is a nice way of saying there is a problem and it is an imperfect cleanup. Lorraine reminded him that they were never promised a perfect cleanup. Denny also described B865 demolition controls and disposal of the contaminated slab as low level waste.

Denny described the 903 Pad remediation, and said although they got off to a slow start they expect completion by the end of September 2003. He said excavation of 138 of 225 cells are complete, and shared the following details:

- 38,410,000 pounds of material excavated
- 1156 containers (intermodals) filled
- 972 containers shipped
- 71 cells excavated at least two, but less than three feet in depth
- 48 cells excavated at least three, but less than four feet in depth
- 19 cells excavated deeper than four feet
- TRU waste excavated

Further expounding upon the TRU waste issue, Denny stated six intermodals have to be repackaged and sent to WIPP. To date the average soil contamination left in the bottom of the cell is 10 pCi/g, which is then covered.

In closing Denny reviewed the project objectives for FY04. Sam Dixon asked that in Kaiser-Hill's future presentations they include the maps in the handouts. She also noted there was no information provided on extra monitoring.

Round Robin

Broomfield - Hank Stovall asked that Dave Shelton (Kaiser-Hill) be given the opportunity to respond to David Abelson's earlier comments about the 903 Pad remediation.

Dave Shelton said David Abelson had alerted the Board to the draft modification to the 903 Pad decision document which Kaiser-Hill had given to EPA. He said this modification had nothing to do with the

recent discovery of TRU level waste, but instead is an issue of incorporating RFCA refuge worker action levels into this remediation action which was approved prior to the RFCA modifications. The proposed changes include removing the top twelve inches of native soil only if it exceeds the RFCA action levels. If soil is not removed, approximately eighteen inches of soil cover will be used to facilitate tent movement. Also, soil already removed that is less than 35 pCi/g will be put back into deeper excavations at the Pad, and a minimum of one foot of imported backfill will cover this soil. Paul Danish raised the issue of the sheer number of kilograms of soil that is contaminated with plutonium. Tim Rehder (EPA) agreed that there are millions of grams of contaminated soil onsite, but a person would not be exposed to it all at once. David said blending-down is not removing a contamination source, but is putting contamination back. Dave said they are not purposely blending contamination down in order to put it back, but blending automatically happens during excavation. He said the real issue is how they know if they are below the action level, and Kaiser-Hill hopes to better determine this by taking samples from five points, fifteen feet apart, compositing them, and if the level is below 50 pCi/g then it will not be necessary to remove the soil. Tim said his concern is about the potential for small but very hot spots. He noted the 903 Pad can contain 300 to 400 grams of plutonium in a very small area, perhaps only three feet across. Sam Dixon said Kaiser-Hill may not call it blending-down but it is essentially what they are proposing.

Public Comment

John Rampe responded to the Coalition's long-term stewardship letter approved earlier in the meeting. He said DOE is working to frame the complex legal and regulatory issues surrounding long-term stewardship. He added that the stewardship strategy is not an ending point, but a starting point for the next round of discussions that will lead to the final regulatory endpoint where commitments will be contained.

Big Picture

David Abelson reviewed the Big Picture. Potential topics for the September Board meeting include the Original Landfill, the Remedial Investigation/Feasibility Study, and renewal of the Intergovernmental Agreement. Hank Stovall said he would like an update on how the worker's re-employment plan is working by September or October. Lorraine Anderson said seeing the slides of workers out there in the trenches made her think there should be some sort of memorial or special honors for these cleanup warriors. Paul agreed their sacrifices should be honored.

The meeting was adjourned by Lorraine Anderson at 11:38 a.m.

Respectfully submitted by Kimberly Chleboun, Program Manager

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