

**Rocky Flats Citizens Advisory Board
Meeting Minutes
September 9, 2004
6 to 9 p.m.
College Hill Library, Room L268
Front Range Community College, Westminster**

Joe Downey, the Board's co-chair, called the meeting to order at 6:05 p.m.

BOARD / EX-OFFICIO MEMBERS PRESENT: Suzanne Allen, Jerry DePoorter, Joe Downey, Earl Gunia, Bill Kossack, Mike Maus, Bill McNeill, Andrew Ross / John Rampe (DOE-RFPO), Steve Gunderson (CDPHE), Scott Surovchak (DOE-LM), Mark Aguilar (EPA), Mark Sattelberg (USFWS)

BOARD / EX-OFFICIO MEMBERS ABSENT: Erin Hamby, Victor Holm, Mary Mattson, Vanessa Safonovs, Phil Tomlinson/Rich Schassburger (DOE-RFPO)

PUBLIC / OBSERVERS PRESENT: Alan Trenary (Westminster resident), Ralph Stephens (Denver), Roman Kohler (Rocky Flats Homesteaders), James Horan (Denver), Deborah Trout (Denver), Cameron Freiboth (Kaiser-Hill), Bob Fiewig (Kaiser-Hill), Bob Nininger (Kaiser-Hill), Win Chromec (Kaiser-Hill), Lee Norland (Kaiser-Hill), Michael Brooks (ATSDR), Karl Shuler (RFCSS) / Ken Korkia (RFCAB staff), Patricia Rice (RFCAB staff)

PUBLIC COMMENT / NEW BUSINESS:

There was no public comment.

In new business items, Board member Earl Gunia asked the site to provide additional information on worker contamination incidents that had been reported in the news media. John Rampe with DOE stated that he did not have any information to provide, but would get back to the Board. Steve Gunderson with CDPHE reported that based on information presented at the most recent Quarterly Stakeholder Meeting with site manager Frazer Lockhart, the one area that is being looked at is how the workers are removing their protective clothing. The site assumes that the outside layers of clothing are contaminated, so workers must take caution when removing the various layers. Efforts are being made to more closely watch the workers when they are undressing and leaving the contaminated work areas.

John Rampe next reported that discussions to develop the post closure regulatory agreement are moving forward and that he anticipates they will have information to share with the community by the end of the month. He has suggested that the date for the next Stewardship Working Group meeting be postponed for one week, until September 30, so that DOE and the regulators can discuss progress on the cleanup agreement at that meeting.

Ken Korkia stated that two members have stepped forward to attend the upcoming Environmental Management Site Specific Advisory Board (EMSSAB) Chairs meeting that will be held the first week of October in Richland, Washington. The local delegation attending the meeting will be members Jerry DePoorter and Phil Tomlinson, and staff member Ken Korkia.

PRESENTATION AND DISCUSSION ON DEMOLITION PLANS FOR BUILDING 447:

Cameron Freiboth, Kaiser-Hill's Building 444 Project Manager, gave a presentation on the Building 447 decommissioning status. Building 447, built in 1956 and located in the southwest quadrant of the Industrial Area, was used for weapons parts production and testing of depleted uranium (DU), beryllium (Be), and other metals.

Building 447 is part of a complex that includes B444, B445, B448, B450 and B451. The building consists of a main level, mezzanine, basement, and attic. The mezzanine is directly above the basement. A tunnel leading to an air exhaust stack was sealed. The stack was removed in 1985.

Contamination in the building included asbestos, uranium, and beryllium. Decontamination efforts have included

removing asbestos-laden panels, machine-scraping the walls and floors, pressure washing the building, and hand scraping walls, floors and ceilings. Asbestos and beryllium have been removed but removing uranium to free-release standards has not been possible.

The original goal of decontamination efforts was to remove uranium to free-release standard. That means "fixed" uranium levels should be less than 5,000 disintegrations per minute per 100 centimeters squared (5,000 dpm/100cm²) and removable or loose uranium should be less than 1,000 dpm/100 cm². However, depleted uranium (DU) above the free-release standard has been all but impossible to remove from metal decking and on structural steel in the basement and mezzanine. There is also "localized" DU in the attic and main level. Because of concerns over worker safety, the building will be demolished without complete decontamination to free-release levels.

Estimated air emissions from DU in a "worst-case scenario" would result in a dose of 0.000072 millirems per year to the "most impacted public receptor," i.e., a person at the site boundary, standing in the spot for 24 hours a day for an entire year. This is far less than the 10 mrem per year standard at the site. The "worst case" scenario would involve release of all estimated 59 pounds of DU in the building.

However, most of the DU is expected to remain fixed on the walls and ceilings when it is demolished. The rubble will be carted away and disposed at a low-level waste facility. The slab of Building 447, which will be at free-release levels, will remain and buried more than four feet below final grade.

An audience member asked why radioactive air emissions were calculated for DU when DU is a toxicological not a radiological threat. DU is a kidney toxin but has low radioactivity. Bob Nininger of Kaiser-Hill answered that site models require air to be monitored during such demolition and that the levels of DU are expected to be quite low.

In answer to a question on how contamination will be "fixed" to the walls, Cameron said a fixative is painted on the walls causing the contamination to stick to the cement.

ROCKY FLATS PUBLIC HEALTH ASSESSMENT:

Michael Brooks with the Agency for Toxic Substances and Disease Registry (ATSDR) was present at the meeting to distribute a draft of the Rocky Flats Public Health Assessment recently completed by his organization. ATSDR is required under the Superfund law to conduct such health risk assessments. In brief remarks after distributing the report, Michael reported that the assessment has determined that the site does not pose a health risk. He also reported that the findings were in part based on the previous Rocky Flats Dose Reconstruction Study that was conducted in the 1990s. In making the determination of public health risk, the assessment examines the future use scenario for the site, a wildlife refuge. The report also assumes that the current cleanup work will be done.

Board members asked how Rocky Flats compares to other sites in the DOE nuclear weapons complex. Michael stated that Rocky Flats is not a very complicated or contaminated site when compared to some of the others. He cited Fernald, Hanford and the Idaho and Los Alamos National Laboratories as sites with much more complex environmental contamination issues.

In a quick review of the report, a Board member noted that one of the conclusions was that any future plan to allow access to RFETS property, even limited access, be carefully reviewed. The member asked how this recommendation matches with the planned development of the wildlife refuge. Michael replied that wildlife viewing would be OK, but digging in the dirt is an activity that should be prevented.

Board and ex officio representatives urged Michael to work with the community in identifying who the report should be sent to and who might like to have presentations on it. John Rampe stated that he would provide Michael with contact information at Rocky Flats so that he could get a complete list of stakeholders. One member also pointed out that the report's list of libraries where it would be available for review did not include some of the downwind communities, notably Arvada.

Currently in draft form, the report is available for public comment through October 20. The report also is being sent out for external peer review, after already having undergone internal review at ATSDR.

PRESENTATION AND DISCUSSION ON THE COMPREHENSIVE RISK ASSESSMENT:

John Rampe of the Rocky Flats Project Office (RFPO) gave a brief overview of how the CRA fits into the regulatory closure process.

John said it is somewhat of a misconception to say that the process outlined by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) has been reversed at Rocky Flats. Those associated with Rocky Flats say the process is reversed because the site undertook to perform "accelerated actions" before it prepared a Remedial Investigation/Feasibility Study (RI/FS). However, John said the site had conducted many remedial investigations before it began cleanup activities.

The first stage in the process is to develop a preliminary assessment/site investigation (PA/SI). The RI/FS follows the PA/SI. The remedial investigation (RI) incorporates the risk assessment done in the CRA process. The RI is meant to yield an understanding of the site. The feasibility study presents a list of alternatives and evaluates what remedial actions, if any, should be taken. Next is the Proposed Plan, in which the agencies describe to the public what is planned to be done. The next step is for the agencies to issue a Record of Decision (ROD).

Lee Norland gave the first part of the CRA presentation. The CRA report will analyze the risks to human health and wildlife from residual contamination at the site. These risks will be calculated for the period after the site has completed remediation. It will also help determine if further action is needed to make the site safer for people and wildlife. The final CRA Work Plan and Methodology was released last week. This document outlines how the final risk assessment to humans and animals will be conducted. The methodology has been in development for a year and a half. It is a collaborative effort of the Risk Assessment Work Group consisting of the Department of Energy (DOE), Colorado Department of Public Health and Environment (CDPHE), the U.S. Environmental Protection Agency (EPA), U.S. Fish and Wildlife Service (FWS), Kaiser-Hill, and stakeholders. Lee said the CRA is scheduled for completion by September 2005.

Win Chromec gave an overview of the work plan and methodology. The components of the CRA for human health are: the data adequacy and quality assessment; the site conceptual model, selection of the contaminants of concern, exposure factors, exposure units, and preliminary remediation goals (PRGs).

For the human health risk assessment, the health risks will be calculated for wildlife refuge worker and wildlife refuge visitor for each exposure pathway and for each media. For instance, contamination in surface soil has a direct exposure route to humans through oral and direct contact. These risks will be calculated for subsurface soil, sediment, and airborne particulates.

For the CRA, the site has been divided into 12 Exposure Units (EUs), which are based on such things as function, use, size, spread of contamination, and ecological habitat. The selection of the EUs was also based on the estimated amount of time a wildlife refuge worker and visitor would spend in each area.

Contaminants are selected by focusing on "risk" drivers. The contaminants are compared to program remediation goals, frequency of detection of the contaminant, a comparison to background levels for metals and radionuclides, professional judgment, and finally, agreement of the regulators.

A data adequacy assessment will be performed sitewide after completion of all accelerated actions. A data quality assessment will be performed for each EU and a contaminants of concern selection process will be applied to each EU. Exposures will be estimated and then the health risks and hazards characterized.

For the environment, there are multiple receptors – wildlife, plants, and aquatic life. For species not listed as threatened or endangered, some adverse effects in the risk assessment may be acceptable. There will be a higher level of protection for protected species, such as the Preble's Meadow Jumping Mouse.

For wildlife, plants and aquatic life, 10 functional groups have been chosen that represent a range of ecological receptors. For each functional group, a representative species has been chosen as the focus of the risk assessment. For instance, one functional group is "burrowing small mammal," and the representative species that has been chosen is the black-tailed prairie dog. Other functional groups and species are: herbivorous or omnivorous small mammal (deer mouse); insectivorous small mammal (deer mouse); Preble's Meadow Jumping Mouse (PMJM); herbivorous or omnivorous bird (mourning dove); ruminant wildlife (mule deer); mammalian

predator (coyote); avian predator (American kestrel); aquatic life (fish, invertebrates, amphibians); and plants.

For the ecological risk assessment, data needs and ecological screening levels for all receptors will have to be established in order to establish a risk to each species.

In answer to a question, Win said the final measurements and data may not be done until next summer. He said the Work Group has outlined a process that would have risk assessments done for the EUs on the "outside" of the site done first and those closer to contaminated areas done last.

Win answered another question by stating that the risk to a wildlife refuge worker will be calculated for four hours a day on site for the next 18 years. The other four hours of the day will be calculated for the wildlife refuge worker in an office building.

BOARD BUSINESS ITEMS:

- Letter to DOE relaying concerns about water quality at the site: The Board reviewed a draft letter relaying its concerns about recent water quality exceedances. These exceedances are tied to remediation work that is underway, particularly at the Building 779 slab removal and the 903 Pad Lip Area. Staff member Patricia Rice distributed some graphs provided by the site that show a decrease in the exceedances when more rigorous erosion controls were put into place. When asked to correlate the graphs with precipitation events, a site representative stated that one of the contaminant spikes occurred when a single storm had over an inch of rain. The site has learned that it is important to get erosion controls in place as soon as possible whenever remediation work involves soil disturbances. They believe that it may take up to two years before revegetation is complete at some of the sites, but when vegetation has returned there will be less erosion potential and water quality should be protected.

In its letter to the site, the Board expresses its concerns about the water quality exceedances and asks the site to move quickly in determining the cause. The Board asks to be kept apprised of the situation and also asks that work on the A-series and B-series ponds be delayed until surface water quality monitoring shows a return to normal. The Board unanimously approved the letter.

- Letter to DOE about its lack of response to Board recommendations: So far in 2004, the Board has submitted six recommendations to DOE, but has received no acknowledgement or response to any. There was a similar lack of response for three of the Board's 2003 recommendations. In a letter to DOE site manager, Frazer Lockhart, the Board raises concern about DOE's lack of response and the importance for the Board to understand how its recommendations are being received. The members unanimously approved the letter.
- Recommendations on the Rocky Flats Cold War Museum: By the end of the year, DOE must submit a report to Congress about the Rocky Flats Cold War Museum. DOE has hired a contractor to assist them in preparing the report, a draft of which is due in October. The Board developed a short list of recommendations to submit for consideration while the report was being drafted. The recommendations state the Buildings 60 and 61 make the most sense to house the museum. The museum should also be combined with community meeting rooms, the reading room, and refuge activities "under one roof." The message of the museum should include more than the Cold War, such as the early history of the site, as well as its ecology. The members unanimously approved the letter to DOE containing the recommendations.
- 2005 Work Plan: At its annual planning retreat held in late August, the Board developed an outline for its 2005 work plan. Board staff developed language for the plan and presented it for the Board's approval. The 2005 plan builds on the plan used in 2004. For 2005, the Board has identified five major work focus areas. These include: 1) Site cleanup and closure to include environmental restoration, building decontamination and demolition, and orphan

wastes; 2) Regulatory closure for activities such as the Comprehensive Risk Assessment, the Remedial Investigation/Feasibility Study, post-closure regulatory agreement, the final Record of Decision, and the ultimate EPA certification to remove the site from Superfund to allow transfer of the property to the U.S. Fish and Wildlife Service; 3) Post-closure planning to include the refuge development, the transfer within DOE from the Office of Environmental Management to the Office of Legacy Management, and post-closure public involvement; 4) Outreach and education to include community workshops, publications, speakers bureau, press releases, editorials, and the website; 5) Participation in meetings and workshops of the national Environmental Management Site Specific Advisory Board (EMSAB).

The Board believes its work must continue through completion of the physical remediation work at the site and include the regulatory activities, culminating in the release of the final Record of Decision for the site. Prior to its shutdown, the Board will complete a report to the community outlining its work and its recommendations for the future. Administratively, the Board also must shut down the 501(c)(3) corporation.

The Board unanimously approved the work plan.

- **2005 Budget:** DOE has indicated it will further reduce the amount of funding it provides to the Board to perhaps as low as \$75K in 2005. Combined with the Board's anticipated carryover of \$75K into 2005, this would provide only \$150K. The Board's budget in 2004 was \$232K, which was a major reduction from previous years that average between \$375 and \$400K. To meet these reductions, the Board has vacated its leased office space, reduced its staff from four to two members, eliminated outside facilitation and advertising for its meetings, as well as other reductions in its community outreach programs.

Staff member Ken Korkia presented the Board with options for how the Board could meet further budget reductions. Among the proposals was a budget for \$200K, which would greatly reduce money budgeted for independent outside review, eliminate staff training, and further reductions in office expenses. Ken compared this reduced budget to a cost-of-living adjusted proposal of \$255K that would keep the Board on par with its 2004 budget. He pointed out that based on two years worth of cuts, the Board had reached the limit where further cuts would greatly impact its operation or limit the amount of time it could continue.

The Board approved the \$200K budget scenario that will require new funding from DOE at \$125K. A letter transmitting the budget will outline the cuts that have been made over the past two years and how any further reductions will have too great an impact on the Board's ability to operate.

PLANNING FOR UPCOMING MEETINGS:

At Committee Night on September 23, the Board will hold a workshop focusing on the topic of independent validation and verification of cleanup. Many in the community have been calling for some type of post-cleanup review. Before the Board weighs in on this topic it wants to better understand what is required by cleanup regulations. To this end, they are inviting representatives from DOE and the regulators to describe what is currently planned. Based on this information, the Board will then be in position to discuss how best an independent review could augment what is required by regulation.

For the October 14 Board meeting, Ken Korkia reported the only potential site document was the Original Landfill Interim Measure/Interim Remedial Action (IM/IRA). He asked the Board to consider other topics they may wish to cover before Committee Night, so that a final meeting agenda can be developed at that time.

NEXT MEETING:

- Date:* October 14, 2004 6 to 9:00 p.m.
Location: Broomfield Recreation Center, Lakeshore Room
Agenda:
- *Presentation on the Original Landfill Remediation Plan (tentative)*
 - *Other to be determined*

MEETING ADJOURNED AT 9:00 p.m. *

(* Taped transcript of full meeting is available in the RFCAB office.)

RESPECTFULLY SUBMITTED:

Bill Kossack, Secretary
Rocky Flats Citizens Advisory Board

The Rocky Flats Citizens Advisory Board is a community advisory group that reviews and provides recommendations on cleanup plans for Rocky Flats, a former nuclear weapons plant outside of Denver, Colorado.

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