



Rocky Flats Citizens Advisory Board
Meeting Minutes
January 10, 2002
6 to 9:30 p.m.

Jefferson County Airport Terminal Building,
11755 Airport Way, Broomfield

FACILITATOR: Laura Till

Jeff Eggleston, the Board's chair, called the meeting to order at 6 p.m.

BOARD / EX-OFFICIO MEMBERS PRESENT: Robin Byrnes, Joe Downey, Jeff Eggleston, Maureen Eldredge, Tom Gallegos, Shirley Garcia, Noelle Green, Victor Holm, Jim Kinsinger, Bill Kossack, Tom Marshall, Mary Mattson, LeRoy Moore, Nancy Peters, Earl Sorrels / Steve Gunderson, Joe Legare, Tim Rehder

BOARD / EX-OFFICIO MEMBERS ABSENT: Suzanne Allen / Jeremy Karpatkin

PUBLIC / OBSERVERS PRESENT: Henry Von Struve (citizen); Rob Henneke (EPA); Joel Colvin (resident); John Corsi (KH); Louise Janson (resident); Mark Sattelberg (USFWS); Anna Martinez (DOE); Bob Nininger (KH); Gary Voorhees (KH); Tom Stewart (CDPHE); Jerry Henderson (RFCAB staff); Ken Korkia (RFCAB staff); Michelle Kump (RFCAB staff); Deb Thompson (RFCAB staff)

PUBLIC COMMENT PERIOD: No comments were received.

REGULATOR UPDATE — CDPHE: Steve Gunderson with the Colorado Department of Public Health and Environment gave his quarterly update on Rocky Flats issues:

- **Special Nuclear Material:** The Plutonium Stabilization and Packaging System is operational and work continues, although not at rates sufficient to meet the May 2002 Defense Nuclear Facilities Safety Board (DNFSB) milestone. About 250 cans out of an estimated 1,800 cans have been processed. There continue to be problems with welding together top and bottom cans. Residue processing is now about 90% complete, with 95 tons out of a total 106 tons having been processed. There are problems with the shipments of plutonium offsite to the Savannah River Site in South Carolina, both because of the shutdown of materials movement after September 11th and because of concerns expressed

by South Carolina Governor Jim Hodges. If shipment of these materials from Rocky Flats does not begin sometime this spring, the 2006 closure schedule will be in jeopardy.

- D&D: Plutonium D&D is farthest along in Building 771, with all actinide liquids having been drained from the piping and about one-third of the process piping being removed. Over half of the gloveboxes and process tanks have been removed. About one-half of the gloveboxes have also been removed from Building 776/777. D&D in Buildings 707 and 371 is still in the preliminary stages. Buildings 111 and 333 were demolished in the fall, well under projected costs. In addition, three surplus guard towers, the PACS buildings, and the old Protected Area fence have been removed completely, although a Protected Area and security fence still exists around Building 371. The site has made significant process clearing non-plutonium buildings of equipment. Buildings 886 and 865 are both scheduled for demolition this year.
- Environmental Restoration: State concerns with the Soil Remediation ER RSOP have been resolved, and CDPHE will approve the document, which will allow remediation work to begin in the Industrial Area. Work on removal of the concrete pad for Building 123, the former medical lab, will commence this month. The primary contaminant under the building is characterized as lead. Excavation of the 903 Pad is slated to begin later this year. Upcoming issues and decision documents this year include the ash pits, solar ponds, landfills, Actinide Migration Study results, and Site Water Balance results.
- Waste Shipping: The site shipped more than 13,000 cubic meters of low level waste last year, and more than 1,000 cubic meters of TRU waste. Shipping rates increased to a high level of 12 shipments per week, with sustained rates of seven per week. The site hopes to increase TRU waste shipment rates to 15 trucks per week.

UPDATE ON WORKER SAFETY ISSUES: Gary Voorheis, Kaiser-Hill Safety Group, reported on an incident that took place on October 10 involving unauthorized venting of gas bottles. Following that incident, five individuals were transported to offsite medical facilities and received blood tests. Mr. Voorheis was asked to head up a team to look into the incident, which included 15 subject matter experts from the site. The investigation was completed in mid-December.

Until mid-2001, the laboratory in Building 776 had been used for headspace gas sampling; that process was then shifted to another building. The lab was in a standby mode until September. During the process of decommissioning B776, Building 559 personnel were asked to remove whatever equipment they needed from the lab in B776. A chemist who had worked in the lab discussed with B776 personnel the possibility of venting gases. B776 personnel assumed the chemist had established a process for this, but that was not the case. The chemist, having over 10 years experience at Rocky Flats, removed equipment and vented gases on 15 separate occasions. On October 10, during one episode of gas venting, personnel working with the chemist smelled an odor associated with the venting process. They left the bottle on the floor near a vent and exited the building. The chemist did not realize the vent he was using was a recirculation rather than an outside vent. Personnel on the second floor immediately above the vent smelled gases, and called the watch manager to report the odor. Some became nauseous. Individuals who

responded to the scene came up the staircase near the vent and were overcome by the gas fumes as well. The building was evacuated, the ventilation system was purged and fresh air was brought into the building.

The chemist thought he knew what he was doing, but neglected to check in with the configuration control authority about his activities. Venting gases must be controlled by a procedure, but the chemist — who had worked in that same building for more than 10 years — thought he knew enough about the lab and building that he could vent the gases without incident. He did not notify his manager or others about what he was doing. Other problems discovered during the investigation included insufficient inventory control: there is not an accurate knowledge of all chemicals that existed in the building.

Toxicologists concluded there probably would not be a long-term health impact to the individuals who were exposed, but they were placed under medical surveillance and will continue to be monitored. The conclusions of the investigation are: 1) that the chemist operated outside program boundaries; 2) management did not maintain control of what the chemist was doing, and 3) the chemical management inventory control is insufficient. Corrective actions have been put in place to solve the problem, including an immediate site wide chemical inventory.

PRESENTATION ON REVIEW OF RISK CALCULATIONS FOR RSALs: Robert Underwood, a professor in the Mathematical and Computer Science Department at the Colorado School of Mines, gave a summary report of his findings. The Board contracted with him to review a collection of spreadsheets written to make calculations on possible dosages of radiation to citizens in the surrounding environment. He noted that he did not try to interpret the results, but was looking at the spreadsheets for mathematical consistency. Overall he thought the spreadsheets had been developed well and were well documented. However, he did have a few concerns with the spreadsheets. For instance, he noted that it seemed to be too easy to change the equations and inputs into the spreadsheets, which should be held constant, and recommended that the appropriate cells be locked so no changes could be made. Also, some variables were mislabeled, but there were no technical problems in those areas. One specific problem he did note was with the open space user calculation: the risk equation for inhalation did not agree with the appendices. A copy of his report was given to the agency representatives with the RSAL Working Group to consider his recommendations and possibly make changes.

CONVERSATION REGARDING THE BOARD'S RSAL RECOMMENDATION 2001-4:

First, Board member Victor Holm gave an overview, his interpretation, of the RSAL recommendation. He noted that part of the confusion exists because oftentimes the term RSAL and cleanup levels are used synonymously, but they are not the same. An RSAL triggers an action, not necessarily cleanup or soil removal, but some sort of action. In the Board's recommendation, it is considered to be an action, not a cleanup. The top-down approach favored by the agencies is where you start at 10^{-4} and continue down to a lower level. The 903 Pad is an example of a cleanup project where that approach may work. However, the Board is

recommending that the agencies consider a bottom-up approach, starting with 10^{-6} , then look at the site holistically and different methods to achieve the best level of cleanup. Other Board members were then asked to give their interpretation of the recommendation; comments are summarized below:

- Begin the RSAL at the most protective level possible
- The ultimate goal for many is cleanup to background; this moves us in that direction
- We want cleanup to background but realize that is not possible by 2006; we hope for a commitment to achieve that eventually and stewardship issues are part of that
- Rocky Flats may set a precedent for other sites in terms of cleanup levels; reiterate that we want the agencies to come back and continue to look at cleanup for as long as it takes
- The recommendation forces a re-examination of what is being done at the site and how
- This is the best way to get agencies to look at the site holistically
- It is important to have the best characterization possible in order to make good decisions
- This is what the public wants
- Stewardship is key as contamination will remain at the site
- The recommendation is fairly flexible; the Board recognizes there are issues about getting to 10^{-6} but wants to have the discussions about what can be achieved
- What are the ramifications and risks if we don't attempt the best level of cleanup?
- This is not a demand, but rather a point to look at and consider; the priorities will be decided, but they must also be justified
- The recommendation is an opportunity to open up a dialogue; it is meant to be a starting point for discussions about stewardship and other issues; don't assume the issue of cleanup is dead at 2006

AGENCY RESPONSE TO RECOMMENDATION 2001-4: Next, the agency representatives were asked to give their view of the recommendation:

- Joe Legare, DOE-RFFO: The scope of the cleanup is largely set; RSAL discussions impact only about 10% of that. The RSALs are a hot issue, but they don't necessarily set the cleanup and don't address other important cleanup issues. We are trying to bring up discussions of other issues to help put the RSAL decision in context. Funding is obviously an important issue that must be addressed, but there is flexibility in what can be achieved to get to a regulatorily compliant cleanup within a fixed budget. DOE will work toward and commit to post-closure stewardship activities, but it's realistic to believe that this will be it for cleanup. We have to take our best shot on what can be achieved with the money we are going to receive, but it must be a safe and compliant closure. We need to spend some time making sure that we are all using the same terminology and that we apply the same meanings to that terminology. Characterization is likely to remain a contentious issue, but one that must also be discussed.
- Tim Rehder, EPA: The recommendation is a valid attempt to get what you want in terms of cleanup, and there are places on the site where that risk level can be achieved. The RSALs are calculated using limited science. EPA's policy, and what is acceptable under

regulation, is 10^{-4} , and that makes it difficult to push for a cleanup many times more than that. There are many reasons to attempt to go lower than 10^{-4} , but it may not be possible to get to 10^{-6} . The recommendation asked the agencies to consider a future resident scenario, but EPA only looks at what is in the foreseeable (near-term) future. And regarding cleanup to background, that was discussed in 1996, but he doesn't feel there is authority to make a promise that the government most likely can't or won't keep. Five-year reviews are a requirement under CERCLA to continue to look at a remedy to make certain it is still protective, but there is no requirement to apply new technology or to do additional work so long as the remedy is still protective.

- Steve Gunderson, CDPHE: What we are trying to do is unique, the decisions were made more unilaterally in 1996 and that didn't work. We are trying to explain the dilemmas and the challenges that are inherent in this closure project. We think we can meet the legal requirements for closure and even go far beyond. The issue is trying to do both what people want and make smart use of the money. More characterization needs to be done, but we need to spend that money wisely too. It does appear as though a large portion of the site is uncontaminated, but more soil samples in the buffer zone need to be taken in areas where no contamination is assumed to exist. There are many complicated and interrelated issues, and decisions must be made about what is realistic and rational, and get the maximum benefit from the dollars available. However, we won't be able to please everybody.

PATH FORWARD ON END-STATE DISCUSSIONS: Finally, the Board talked about how these discussions could move forward to the issue of end-state decisions. Some general topics will need to be addressed, such as surface soil, subsurface soil, surface water standards, and stewardship. Staff has suggested that the Board needs to: 1) learn about contamination, characterization, the extent of contamination, pathways to exposure, and uncertainties; 2) define the problem, and evaluate the alternatives such as remediation technologies; 3) define goals and community values; 4) evaluate and learn about costs; 5) understand the regulatory perspective and stewardship issues; 6) determine whether it meets risk reduction needs; and 7) understand cost benefits and financial constraints. The End-State Steering Committee will help the Board decide on next steps for its discussion, and will return with a proposal for the Board's consideration. The committee meets on Monday, January 14.

APPOINTMENT OF CO-CHAIR FOR STEWARDSHIP WORKING GROUP: Because of the resignation of Jerry DePoorter, the Stewardship Working Group needs a new co-chair. However, there are some issues that must be resolved first. It may be necessary to discuss the possibility of moving the meeting time to a later starting time, so that a Board member will be able to serve as co-chair. The next meeting of the Stewardship Working Group is in late February. Board members who are on the Stewardship Working Group will continue to discuss a replacement co-chair and return to the Board with a recommendation.

EXECUTIVE SESSION: Based on a recommendation from the Personnel Committee, the

Board unanimously approved a 6.1% increase for Deb Thompson, which makes her salary \$39,000 per year, effective January 1, 2002.

NEXT MEETING:

Date: February 7, 2002, 6 to 9:30 p.m.

Location: Jefferson County Airport Terminal Building, Mount Evans Room,
11755 Airport Way, Broomfield

Agenda: Update by EPA; presentation on OU1 Five Year Review Process;
end-state discussions; report on EMSSAB Groundwater Workshop

MEETING ADJOURNED AT 9:50 p.m. *

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

RESPECTFULLY SUBMITTED:

Shirley Garcia, 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.

[Home](#) | [About RFCAB](#) | [Board Members](#) | [About Rocky Flats](#) | [RFCAB Documents](#) | [Related Links](#) |
[Public Involvement](#) | [Board Vacancies](#) | [Special Projects](#) | [Contact](#)