

Rocky Flats Citizens Advisory Board

Meeting Minutes

July 12, 2001

6 to 9:30 p.m.



Broomfield City Hall,
One DesCombes Drive,
Broomfield

FACILITATOR: Laura Till

Jerry DePoorter, the Board's chair, called the meeting to order at 6:10 p.m.

BOARD / EX-OFFICIO MEMBERS PRESENT: Suzanne Allen, Jerry DePoorter, Joe Downey, Jeff Eggleston, Tom Gallegos, Jim Kinsinger, Bill Kossack, Tom Marshall, Mary Mattson, LeRoy Moore, Nancy Peters, Earl Sorrels / Jeremy Karpatkin, Joe Legare, Tim Rehder

BOARD / EX-OFFICIO MEMBERS ABSENT: Jeff Allen, Robin Byrnes, Maureen Eldredge, Shirley Garcia, Mary Harlow, Victor Holm, Jason Krupar, Markuené Sumler, Bryan Taylor / Steve Gunderson

PUBLIC / OBSERVERS PRESENT: David Abelson (RFCLoG); Don Owen (DNFSB); Lane Butler (Kaiser-Hill); Anna Martinez (DOE-RFFO); Melissa Anderson (RFCLoG); Carl Spreng (CDPHE); Patrick Etchart (DOE-RFFO); Alan Trenary (citizen); Susan Serreze (RFETS); Bob Nininger (Kaiser-Hill); Norma Castaneda (DOE-RFFO); John Corsi (Kaiser-Hill); Joshua Levin (Decision Research); Jerry Henderson (RFCAB staff); Ken Korkia (RFCAB staff); Noelle Stenger (RFCAB staff); Deb Thompson (RFCAB staff)

PUBLIC COMMENT PERIOD: No comments were received.

REGULATOR UPDATE (DNFSB): Don Owen, Rocky Flats site representative for the Defense Nuclear Facilities Safety Board (DNFSB), gave a quarterly update on issues being tracked by the Defense Board:

- The Plutonium Stabilization and Packing System (PuSPS) started up in mid-June. The Defense Board's Recommendation No. 94-1, issued in 1994, recommended the site achieve plutonium stabilization in eight years. The current plan is to package and stabilize material for long-term storage at the Savannah River Site. DNFSB reviewed plans in

preparation for the startup of PuSPS operations, with an eye toward contamination controls for the inner cans. Improvements were made based on the Defense Board's suggestions, such as taking readings on inner cans to confirm that adequate control of the process is occurring. DNFSB issued a favorable letter regarding determination of safety on PuSPS.

- Kaiser-Hill is targeting a mid-2002 completion for repackaging of plutonium residues. All operations for residue repackaging are in Building 371, and all lines are currently up and running.
- Building 771 pipe draining continues and is on target.
- In March, DNFSB issued a letter regarding safety management during plutonium thermal stabilization activities in Building 707. One operational anomaly discovered by DNFSB was that there were unusual glovebox pressure fluctuations occurring. An inquiry determined that Kaiser-Hill was not implementing a required authorization basis control to ensure there was no unusual reaction, particularly at higher temperatures. In response, both DOE-RFFO and Kaiser-Hill have determined that corrective actions were warranted; those actions have been developed. A plan has been forwarded to DNFSB Headquarters, but has not yet been officially presented to the Defense Board for consideration.
- DNFSB last year issued Recommendation No. 2000-2, regarding the need for management of safety systems. This recommendation was addressed to the nuclear weapons complex in its entirety. As a result of that recommendation, safety system assessments have been performed on Buildings 371 and 559. The results of those assessments have been forwarded to DNFSB Headquarters.
- Finally, regarding safety concerns at Rocky Flats, corrective actions under Kaiser-Hill's Site Safety Improvement Plan are in progress. One item under the plan that DNFSB considers to be especially favorable is the use of "Technical Response Teams." This new approach is currently being implemented, and helps provide direct assistance to project workers by using a team of site workers with various disciplines and backgrounds who are on-call. This multi-discipline team provides advice to other work teams. The Technical Response Team concept has been implemented in 771 with some success; this concept will be implemented in other projects as well.

DISCUSSION ON DEVELOPING RECOMMENDATIONS/COMMENTS ON THE ENVIRONMENTAL RESTORATION RFCA STANDARD OPERATING PROTOCOL

(ER RSOP): The Environmental Restoration Committee developed a list of questions about the ER RSOP. That list of questions was forwarded to site representatives, who attended the Board meeting to answer each question specifically and to spur a discussion and dialogue on the ER RSOP. Following is a summary of the responses to those questions given by Kaiser-Hill/RFETS representatives Lane Butler, Lee Norland, and Susan Serreze (Note: a written copy of the complete transcript of questions and answers can be obtained from RFCAB staff):

1. **Regarding the definition of "routine" activities:** Routine activities are those activities that are repetitive in nature, but guided by procedures. Most all involve soil cleanup and associated debris. Regarding potential contaminants of concern, the spectrum is fairly

narrow and remediation options are limited. Levels of contamination will vary, as will the configuration of the sites, but remedial options are limited. Variations in the complexity of cleanup are addressed through work controls. Non-routine applies to remedial actions that require special engineering design and/or regulatory agency approval. The 903 Pad cleanup is considered routine, although the 903 Lip Area is not. Remediation of the six miles of process waste lines at the site will need to be accomplished in phases. The ER RSOP only includes the portion of the cleanup that involves digging up and removing soil and other materials, or if it is determined to actually remove the process waste lines. Other decision documents will apply to specific remedial actions of the process waste lines themselves, to cover actions other than excavation.

2. **Regarding alternative analysis:** Digging up and removing soil and other materials is the only action considered in the ER RSOP; this approach is considered the most conservative. The ER RSOP does not provide for an alternative analysis. It is presumed that these are the most appropriate actions for the specific remediation required. Most are routine actions, and are considered to be similar to a presumptive remedy. If indeed there is a different remedy, or it is discovered that an alternative analysis is needed, it will not be part of this ER RSOP. The ER RSOP is an accelerated action. The intent is that cleanup will be consistent with the site's final cleanup goals, and that remediation will meet the requirements of a final action.
3. **Regarding long-term stewardship:** Kaiser-Hill plans to develop language in the ER RSOP that describes how the accelerated actions address stewardship issues, and how the actions contribute to site environmental stewardship goals. The primary contribution to long-term stewardship goals is risk reduction through source removal.
4. **Regarding ALARA:** The new radiation control ARARs have been added to the ER RSOP. Kaiser-Hill will add language describing ALARA, which acknowledges the ongoing dialogue regarding an ALARA analysis.
5. **How to keep track of residual contamination:** All remedial actions involve confirmation sampling to confirm that remediation goals are met. The remediation process involves an accelerated action closeout report, and documentation of all sampling is recorded for that closeout report. The report will have maps of sampling locations and the values found at those locations.
6. **Why the urgency of this document:** Kaiser-Hill wants to proceed now so that source removal and risk reduction can begin as soon as possible. The ER RSOP is Soil Action Level neutral. The methods used in the ER RSOP will be used regardless of the final RSAL value. None of the projects will begin before the RSAL is determined.
7. **Independent verification of samples:** Independent verification is required under the Industrial Area Sampling and Analysis Plan and the Draft Buffer Zone Sampling and Analysis Plan. Validation of data will be performed as samples are taken in the field. Independent data validation will be followed according to current site procedures.
8. **Explain the statement "agreed upon cleanup levels" for subsurface soils:** When the RSALs are finalized and a process is approved, that is the level of cleanup intended in the ER RSOP. The expectation is that both the RSAL and ALARA process will be resolved before going to the field and beginning work.

9. **Regarding the letter of notification:** This letter speaks to the intent to invoke the ER RSOP; however, DOE will work with the agencies through the consultative process to agree on remediation areas and contaminants of concern. In addition, agency consultation will be solicited throughout both the characterization and remediation processes.
10. **Regarding backfill requirements:** Treated soils that are below background may be used as backfill anywhere on the site. Treated soil with radionuclides or inorganics below Tier II action levels may be used as backfill in the site in came from. Determinations on soils above Tier I action levels will be made on case-by-case basis. It is important to note that after the ALARA and RSAL process is completed, the backfill requirements may be changed.

Next, Board members discussed comments and concerns for the Environmental Restoration Committee to address in the draft recommendation it will prepare for the ER RSOP. Some of the concerns and comments expressed include:

- continuing concerns regarding stewardship issues;
- how the ALARA process will be used in the ER RSOP;
- lingering concerns about backfill requirements;
- concerns that it is premature to approve this document before RSALs are defined;
- concerns that many parts of the decision document still seem vague;
- add language asking the site to specifically state in the document that this process will not begin until an RSAL is set and ALARA process is defined;
- suggest a public notification process on a quarterly basis; and
- address questions regarding in-situ treatments.

Based on those comments, suggestions, and concerns, the committee will prepare a recommendation for the Board to approve at its August meeting.

RSAL REVIEW DISCUSSION I: This was the first in a series of discussions on RSALs in preparation for an eventual recommendation by the Board on this topic. First, RFCAB staff presented an outline of the RSAL discussion process as recommended by the Environmental Restoration Committee. The process over the next couple of months includes an additional work session for the Board, to be scheduled sometime in August. RFCAB staff will poll Board members in order to select the best possible date for the week of August 13. This first RSAL session was designed to help identify what kind of information will be necessary in order to develop the Board's recommendation(s) on RSALs. The Environmental Restoration Committee would like to focus on a few key technical areas and parameters.

As part of the discussion, Bob Nininger with Kaiser-Hill gave a basic presentation on the sensitivity analysis conducted by the RFCA RSAL Working Group to determine what parameters are significant to the RSAL calculation. Sensitivity analysis is a method to determine what inputs are the most important to mathematical modeling. A sensitivity analysis is important to help

understand model results, because not all inputs to a model are equally important, and the analysis helps to provide insight into exposure mechanisms for any given scenario. He briefly reviewed some of the definitions in modeling, such as pathways, parameters, and the term "conservative," which describes a choice that will give a more protective result. A sensitivity analysis includes the following components: 1) a pathway analysis, 2) a parameter analysis, 3) evaluation criteria, and 4) communication and discussion of the results. The mathematical basis for ranking includes assigning a preliminary mid-point parameter value, assigning limits to the expected range of possible parameter values, running the model, and calculating a sensitivity coefficient. Parameters may then be represented either by a point value or may be statistically distributed. Some of the more sensitive parameters include the primary pathways of soil ingestion, inhalation, plant ingestion, and receiving an external dose. Other sensitive parameters are considered such as the amount of time spent indoors, wind speed, soil ingestion rates, mass loading, inhalation rates, shielding, density and thickness of the contaminated zone, plant root depths, and plant consumption rates. Next steps for the RFCA RSAL Working Group are to finalize parameter characterization and selection, format the parameters to make sure they provide equivalent inputs, verify the inputs, run the model, present the range of RSAL results, and finally to write the Task 3 report.

The Environmental Restoration Committee recommended that for the remainder of the Board's RSAL review discussion, RFCAB consider focusing first on a few key technical issues, then move on to discussions on a few key policy issues. Technical issues may include details of the key RSAL parameters, scenarios, EPA risk equations, and uncertainty. Policy issues the Board may want to discuss include selection of a particular risk level to serve as the basis for the RSAL, the value of retaining a tiered action level framework, ALARA issues, and the overall cleanup approach (top-down versus bottom-up). Board members approved this approach to the remaining RSAL review discussions. Two key parameters will be discussed at the next Board meeting: mass loading and soil ingestion.

NEXT MEETING:

Date: August 2, 2001, 6 to 9:30 p.m.

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

Agenda: Update by CDPHE; draft recommendation on Environmental Restoration RSOP; part two of presentation and discussion on RSAL review: mass loading and soil ingestion rates

MEETING ADJOURNED AT 9:05 p.m. *

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

RESPECTFULLY SUBMITTED:

Jeffrey Eggleston, 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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