

# ROCKY FLATS CITIZENS ADVISORY BOARD

## MINUTES OF WORK SESSION

### October 5, 1995

---

**FACILITATOR:** Reed Hodgins, AlphaTRAC

Linda Murakami called the meeting to order at 6:10 p.m.

**BOARD / EX-OFFICIO MEMBERS PRESENT:** Alan Aluisi, Jan Burda, Lloyd Casey, Tom Clark, Ralph Coleman, Eugene DeMayo, Mike Freeman, Tom Gallegos, Kathryn Johnson, Sasa Jovic, Mike Keating, Jack Kraushaar, Beverly Lyne, Tom Marshall, LeRoy Moore, Linda Murakami, David Navarro / Leanne Smith, Steve Tarlton

**BOARD / EX-OFFICIO MEMBERS ABSENT:** Tom Davidson, Albert Lambert, Gary Thompson

**PUBLIC / OBSERVERS PRESENT:** Kenneth Werth (citizen); David Riley (citizen); Kurt Muenchow (DOE); T. DuPont (citizen); L.A. Helmerick (DOE); Bill Shultz (citizen); Cliff Villa (EPA); Delicia Bates (citizen); Steve Cochems (Hunter Douglas); Chris Dayton (K-H); Russell Boyd (K-H); Mark Stock (Bethany Corp.); Kelly Coleman (CSM); Ann Lockhart (CDPHE); Sam Cole (PSR); Melody C. Bell (DOE/RFFO); Kim Seebaum (citizen); Alan Trenary (citizen); Jim Stone (RFCC); Mariane Anderson (DOE); Rose Mary Wright (citizen); Doug Young (Governor's Office); Nancy Tuor (K-H); Rick Warner (citizen); Gerd von Glinski (citizen); Susan Johnson (NCSL); Lisa Hanson (CAB staff); Erin Rogers (CAB staff); Deb Thompson (CAB staff)

**PRESENTATION - CONTAMINANTS AT ROCKY FLATS** (Susan Griffin, EPA): Susan covered the basic concepts in toxicology, including the basic characteristics of chemicals, both natural and synthetic, and how they may produce toxic effects in humans. Also discussed was the dose-response relationship, different pathways for exposure (such as through the skin, lungs or GI tract), and the potential effects of radioactivity at different exposure levels. Susan reviewed the four basic types of ionizing radiation (alpha, neutron, beta, and x/gamma ray); different cell sensitivities; measurement of dose equivalents; sources of exposure and annual estimated amounts; and cancer risk estimates. Most of the scientific knowledge of the effects of radiation exposure, derived from studies such as the Japanese atomic bomb survivors, are based on high dose, short duration exposure. There is a great deal of uncertainty in calculating the expected effects or health risks posed by sites such as Rocky Flats, which may be contributing low doses of radiation over much longer time periods. This uncertainty leads EPA to extrapolate probabilities of potential

risk, such as stating that a specific exposure presents a 1-in-1,000 to 1-in-100,000 probability of developing cancer.

**Q/A Session:**

Question: When you talk about not having much data at the low end, does that apply equally to radiation and the chemicals that we're concerned about?

Answer: For example, plutonium and uranium, it's a similar situation. It also applies to the non-radionuclides as well.

Question: So it's fair to say we don't know much about the stuff at the low end of the curve?

Answer: Right, the environmental concentrations that you will see at Rocky Flats - you will see at most hazardous waste sites - that is where the greatest source of uncertainty is.

Question: The linear approach that you say EPA takes assumes that there is any exposure to some form of radiation. At the same time, EPA, CDPHE and other government agencies do set so-called safe standards for exposure. These are really standards for permissible exposure rather than really standards for public safety.

Answer: What would happen is that if we cleaned up something based on any type of probability of risk, as soon as you hit something about zero concentration, if you had to clean it up there wouldn't be enough money in the federal budget to do it. This is more policy management rather than risk assessment, but a level had to be set which would be considered acceptable for public safety.

Question: Acceptable to whom?

Answer: Acceptable for the public, for the people who are exposed.

Question: You talked about EPA using a linear curve. Have you looked at all at some of the work people like John Goffman have done where they suggest that the response for radiation is greater at lower levels? I would hope that's something that can be discussed in the course of these presentations.

Answer: I personally have not looked at that, but it's something I urge you to take into consideration. The agencies have a big emphasis at looking at the uncertainty in risk assessments. But risk assessment is only one piece you look at when you talk about cleaning up a site. You need to take into consideration public acceptance, technical feasibility, cost of the cleanup.

Question: In further discussions will you be comparing what Rocky Flats standards are in comparison to national standards - to familiarize the local community?

Answer: We will note that for the next presentations in this series.

### **RESPONSES TO COMMUNITY QUESTIONS:**

Comment: Alan Trenary: I live around 100th and Simms. I attended a meeting here with a radiation expert. There was a gentleman there who was a member of the grand jury which was investigating Rocky Flats. He told me about the Leyden mine gas repository, which is a coal mine with water underneath it, and it's five miles in diameter and parts of it are almost directly underneath Rocky Flats. He said that the water in this mine is contaminated with radionuclides. I'm assuming it was illegally dumped there at one time or another. It scares me quite a bit to think that all of our natural gas is being exposed to those radioactive particles. I realize this is a very heavy issue, but it's something I'm pretty concerned about and I think we all should be concerned about it. This stuff is present and it's being pumped into all of our homes. He was also talking about the barrels of plutonium metal that are stored there that are breaking down the plastic liners inside the barrels and generating hydrogen gas, and that it burns like magnesium if it catches fire. I'm really seriously against declaring Rocky Flats a zone where you could just lock it up and forget it. I have co-workers from the Soviet Union, from Kiev in the Ukraine, and all of their relatives back home are getting leukemia, bone marrow cancer, etc. from their exposure from the Chernobyl accident. I want to emphasize that we need to do something very serious about this problem, so we can show the Soviets that we're serious about it. They've got us beat on plutonium like two-to-one, and they're making more all the time. We have to do something about this.

Response: Leanne Smith: I have a piece of good news. In the next couple of weeks, we're going to complete removal of all the plutonium that is in direct contact with plastic. We've recognized your concern. We still have plutonium in proximity with plastic, and in this fiscal year 1996 we will complete repacking that plutonium - remove the organics. We have to 600-900 more drums of residues, that will be completed in December of this year. Congratulate our contractor, they have gone through about 2,400 containers just in fiscal year 1995.

Question: David Riley: In the buffer zone around Rocky Flats, mostly there's plutonium in that soil. From what I hear, Kaiser-Hill doesn't want to go on studying the soil contamination and how the plutonium traveled through the soil or gets washed off the soil and into the drinking water or whatever. What is your opinion about why Kaiser-Hill doesn't want to continue this?

Answer: Chris Dayton: Iggy Litaor is back onsite working on his study of soil contamination and migration - he is continuing on with his research. Susan Griffin: When you're doing a risk assessment, you first identify who's going to be exposed, and from that you look at how they're going to be exposed. So if these are plausible pathways, then they should be looked at.

Question: Kenneth Werth: Would you please define 10-6 and 10-4. As a layperson, I do not know what you're coming up with when you're discussing figures like that.

Answer: Susan Griffin: When we use those figures, what we're saying is that there's a one-in-a-million probability that someone may contract cancer above the naturally occurring background from which people in this country get cancer.

Question: Kenneth Werth: Is that acceptable?

Answer: Susan Griffin: The agency has deemed a one in 10-4 and one in 10-6 probability is acceptable.

Question: Mark Stock: Do your toxicology studies take into effect the end growth, the fact that it's changing?

Answer: Susan Griffin: The quantitative factors that we now use take that into account.

### **PUBLIC COMMENT PERIOD:**

Responses to questions from last month's meeting:

- 1) Concerning Rocky Flats being on the internet. They are on the internet currently. There are very few servers, but everyone on the site with either cc:Mail or MicrosoftMail can send and receive internet mail. A world-wide-web home page for Rocky Flats is being planned by DOE and included in the '96 budget. That should be completed in March or April of next year.
- 2) Concerning the Front Range Reading Room, and DOE meeting requirements for it. The DOE Public Reading Room located in Front Range Community College is open and staffed two afternoons per week - Tuesday and Thursday from 12:30 to 4:30 p.m. They are going to change that schedule. It will be staffed Monday through Thursday from 8 a. m. to 4:30 p.m., four days a week.

Question: Kenneth Werth: What makes DOE, EPA, CDPHE and Kaiser-Hill think that they can pass off a low-level nuclear waste dump by calling it a low-level nuclear waste cell? The dictionary defines a cell as a small enclosed space, a small chamber, a small

group of members within a community. This in no way represents digging a trench that is 200 yards long, 20 yards wide, and 30-40 feet deep for all the low-level contaminants out there. It in no way represents a small cell. If the people of Colorado let this low-level nuclear waste dump be built on a future industrial site, what a great injustice it will be for the people of Colorado and for the environment.

Answer: Steve Tarlton: I don't have a good answer for you. But there is a process that is underway right now to define whether or not onsite disposal of low-level radioactive materials is feasible, what criteria would apply for it to be feasible, and then whether or not it's publicly acceptable. We've been talking about it for quite a while. There is room in that decision-making for public acceptability of onsite disposal. That will be a key factor in whether or not it's done.

Question: Kenneth Werth: It hasn't reached the public yet. What makes you think that you can pass something over like this on the public without getting a consensus on it?

Answer: Steve Tarlton: The decision has not been made. It is in the process, and there has been outreach to the public to involve them in that, but there has not been a decision made yet. That decision won't be made until the public gets involved.

Response: Eugene DeMayo: I wonder the same thing you are wondering - what's the difference between a cell and permanent disposal? This looks like something you could call a disposal site. The only difference to me is that they're saying maybe they'll remove it later on. Certainly the only comments we've gotten on onsite disposal at Rocky Flats have been from the Future Site Use Working Group, which says no onsite disposal - clean it up and get it out of here.

Response: Kate Morrison: I'm working with Parsons-Brinckerhoff on the Site Wide Environmental Impact Statement. A low-level waste disposal will be evaluated as part of the SWEIS, and there will be an opportunity for public comment then. I believe there will also be other opportunities, but this will come up in August of 1996.

Question: Kenneth Werth: Is the DOE going to have any say in this? We as citizens are going to have to live with that out there. Kaiser-Hill after five years can just walk away.

Answer: Leanne Smith: DOE will remain the decision-maker. There's going to be some public interface and working with our regulators.

Response: Nancy Tuor: In the way of soliciting public comment and input on the proposal for a waste management facility for low-level and low-level mixed waste, we put forth some preliminary ideas with CAB, RFLII, Jefferson County, Broomfield, Westminster and have also raised the issue at the most recent monthly Rocky Flats meeting. As a result

of that preliminary input, we've already made some revisions to some of the alternatives that we are looking at. As we continue to refine those and get comments back from the Site Wide Issues Committee, we will then put forth a more formal proposal toward the end of the year and go into a full formal public comment period, which will have some separate public meetings and continued discussions. We also have worked with the Public Participation Focus Group to talk about options for public comment. If there are some other forums we're not reaching, we'd be glad to do that. We will continue to do that before we make a recommendation to DOE.

Comment: Kenneth Werth: Please don't call this a nuclear waste cell. Call it by its true name - it's a nuclear waste dump. If the people of Colorado hear that it's a dump, it's going to flatly be rejected.

Comment: Alan Trenary: I'm a little concerned about a lot of the government agencies feeling like they can remediate this due to the fact that it costs so much money, and we're not going to be held accountable to the laws. There's a lot of regulation going on now with EPA that businesses are complaining about, and I'm concerned that we need to start forcing the government to be as accountable to these issues as the general public are accountable. We're going to have to start looking at things that are currently taken as a given. There is a lot of things that have been shoved under the rug in the name of national defense. I'm 32 years old and there are not too many people my age who are terribly concerned about these issues. I personally watch films about Hiroshima and Nagasaki, and in discussing this with my peers I wish sometimes we could have an above-ground test once in a while to show people what happens when these things go off. A lot of people don't grasp exactly what the destructive power they're dealing with here. They don't grasp what the toxicity of plutonium is. I would like to see some emphasis placed on the glass vitrification that was being discussed at the meeting I attended. I have a little marble that came from the Hanford site in Washington state. My wife's mother lived up there before she found cancer polyps in her colon and liver and died soon after that - after she had been working on the Hanford site. That's another reason I'm here - I have been personally touched by radiation exposure. What happened at Hanford when they were burning down the radioactive iodine to come up with the radioactive materials needed for the bomb program - a lot of radioactive materials are in the environment. My mother-in-law was exposed to those and that's part of the reason she got sick. We're trying to get our representatives and government agencies to be as accountable to these laws and rules as we as private citizens are expected to. If my daughter makes a mess, I try to make her clean it up. We're responsible for our own problems. I feel the EPA's Superfund is being used as a means for rich people to make a lot of money of toxic wastes and chemicals and to slough off the responsibilities of cleaning up these messes that they made. I'd like to see this not be part of the U.S. character. I heard something about them wanting to make them so that if it wasn't a law or the mess was made prior to 1980, then they're not responsible for cleaning it up. Something has to be done about it. I know there's a lot of cost in cleaning up the mess, and I don't want my baby to have to pay for it.

## **SITE WIDE ISSUES COMMITTEE RECOMMENDATIONS:**

**Rocky Flats Cleanup Agreement Negotiations and Five Major Issues** (Jan Burda): The committee prepared a recommendation presenting CAB's position on resolution of the outstanding issues in RFCA negotiations.

**Recommendation:** Approve recommendation on RFCA. Minor changes to the text were recommended.

**Action:** Motion to accept as amended. APPROVED BY CONSENSUS.

**Site Wide Environmental Strategy Agreement** (Linda Murakami): This recommendation asks for a delay to include stakeholder input into SWESA, and not to use the document as a basis for negotiations in the RFCA workout session.

**Recommendation:** Approve recommendation on SWESA.

**Action:** Motion to accept. APPROVED BY CONSENSUS.

**Waste Management - Storage and Disposal Issues** (Tom Marshall): The committee has developed a comprehensive recommendation on waste disposal policy, which includes guiding principles, specific recommendations and deliverables requested from DOE.

**Recommendation:** Approve recommendation waste management. Minor changes to the text were recommended.

**Action:** Motion to accept as amended. APPROVED BY CONSENSUS.

## **ANNOUNCEMENTS:**

- Chuck Clark has resigned from the Board due to time constraints and his work load.
- There is a full-day tour of Rocky Flats scheduled for Monday, October 16; let Erin Rogers know by tomorrow if you want to attend. Also, if anyone is interested in a Saturday tour, let Erin know about that as well (Leanne Smith has offered to lead a tour on a Saturday).
- Remember to sign up for the CAB/RFLII joint event on Friday, October 13, from 5-7 p.m.
- Lisa Hanson has resigned her position effective November 3. She is taking time off to travel through southeast Asia and Indonesia for the next six months or so.
- SSAB evaluations will be mailed to CAB members; please complete and mail them

back asap.

**TRIP TO WIPP** (Tom Marshall): DOE/WIPP has offered to provide a tour of WIPP for CAB. They have offered to fly Board members there, and pay for lodging etc. It's important for CAB members to have a good working knowledge of facility. The other intent of the trip is to meet with citizen groups in the area who have other opinions on the issue. An impartial, non-DOE person should go along on the tour. Even though DOE has offered to fly the entire Board down and paying for lodging, one thing to bear in mind is the issue of fiscal responsibility. Tom recommends that only Board members on Site Wide Issues and Environmental/Waste Management committees, if they feel it is important, go on the tour. Other CAB members did not feel it should be limited to only certain Board members. The proposed dates are: leave on Thursday, October 26, tour on Friday, October 27, return on Saturday, October 28. Only two Board members were available to attend at that time. Staff was asked to make arrangements for alternative dates.

**COMMUNITY OUTREACH COMMITTEE RECOMMENDATIONS** (Kathryn Johnson):

- Co-sponsor 1996 Rocky Flats Summit.

**Recommendation:** That CAB agree to co-sponsor the 1996 Rocky Flats Summit. One Board member expressed concern about the effectiveness and implementation of what was done at the first Summit - if priorities from first Summit did not get attention/action, why pursue a second Summit? However, this Board member did not wish to block consensus.

**Action:** Motion to accept. APPROVED BY CONSENSUS.

- Endorse Rocky Flats Public Participation Guidance document.

**Recommendation:** That CAB agree to endorse the Public Participation Guidance Document prepared by the Public Participation Focus Group. Some CAB members had concerns with specific ideas represented in the document, and others were concerned that the public had not had an opportunity to review and comment.

**Action:** Motion to table this recommendation until CAB members as well as the general public have had an opportunity to review and consider the document.  
APPROVED.

**NEXT MEETING:**

Date: November 2, 1995, 6 - 9:30 p.m.

Location: Westminster City Hall, Multi-Purpose Room

Agenda: Fundamentals of risk assessment; 1995 spring rain effects on plutonium migration; recommendation on plutonium and SNM consolidation

**ACTION ITEM SUMMARY: ASSIGNED TO:**

- 1) Forward RFCA, SWESA and Waste Management recommendations - Staff
- 2) Let staff know of interest in tour of RFETS - Board members
- 3) Complete and return SSAB evaluations - Board members
- 4) Make arrangements for alternative date/tour of WIPP - Staff
- 5) Review and make comments on Public Participation Guidance Document - Board members

**MEETING ADJOURNED AT 9:50 P.M.**

\* Taped transcript of full meeting is available in CAB office.

**MINUTES APPROVED BY:**

---

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.

[Top of Page](#) | [Index of Meeting Minutes](#) | [Home](#)

[Citizens Advisory Board Info](#) | [Rocky Flats Info](#) | [Links](#) | [Feedback & Questions](#)