

**ROCKY FLATS CITIZENS ADVISORY BOARD
MINUTES OF WORK SESSION
February 1, 1996**

FACILITATOR: Reed Hodgins, AlphaTRAC

Eugene DeMayo called the meeting to order at 6:05 p.m.

BOARD / EX-OFFICIO MEMBERS PRESENT: Jan Burda, Tom Clark, Eugene DeMayo, Mike Freeman, Tom Gallegos, Paul Grogger, Mary Harlow, Kathryn Johnson, Susan Johnson, Sasa Jovic, Beverly Lyne, David Navarro, Gary Thompson / Dave Brockman, Jeremy Karpatkin, Tim Rehder, Steve Tarlton

BOARD / EX-OFFICIO MEMBERS ABSENT: Alan Aluisi, Lloyd Casey, Ralph Coleman, Michael Keating, Jack Kraushaar, Tom Marshall, LeRoy Moore, Linda Murakami

PUBLIC / OBSERVERS PRESENT: Liz Knapp (DESP); Kenneth Werth (citizen); Janet Wood (citizen); Jane Grogan (AlphaTRAC); T. DuPont (citizen); R. J. Coppin (citizen); Michelle Magnolo (citizen); Mariane Anderson (DOE); Frank Smith (citizen); Jack Vrouwes (citizen); Kay Ryan (SWEIS); Jerry Anderson (citizen); A. B. Sheldon (citizen); A. R. Teter (retired RFP); Cliff Villa (EPA); Ryan Domocmat (citizen); Don Scrimgeour (CAB interim project administrator); Ken Korkia (CAB staff); Erin Rogers (CAB staff); Deb Thompson (CAB staff)

PRESENTATION - CONCEPTUALIZING AND COMMUNICATING RISK (Sonya Pennock, U.S. EPA; and Laura Belsten, Health and Environmental Programs, University College, University of Denver): Risk communication can be difficult as you're dealing with a technical subject in which narrow parameters are taken into account, yet those who are affected look at the risk in much broader terms. Risk assessment includes making decisions about the acceptability of risk, which is subjective. Risk communication has begun to move farther away from using numbers and a purely scientific approach, toward communicating the risk itself in a human dimension; consequently it has become more of an interactive process. Sonya and Laura discussed research done by Peter Sandman which shows that the level of trust in risk assessments is directly proportionate to the level of trust in the individual or organization who conducted the assessment, and whether there is any perception of empathy or concern. Culture and personal belief factors into this as well; i.e., the level of "outrage" that an individual may feel about the impact of a particular risk on their family and/or community. The public may see risk as more of a

threat if it is involuntary, unfair, or beyond their control. They also discussed risk comparisons, considering the cost effectiveness of life-saving interventions, and suggested making more rational decisions about how much to spend on those interventions.

Q/A Session:

Question: I was interested in your explanation as to why one should be careful when comparing different types of risk.

Answer: When you compare risks, they sometimes don't carry the same outrage factors with them. People have a difficult time with the fact that they may, for instance, choose to cross the street, but they didn't choose this toxic substance, and feel differently about the control they have.

Question: I would ask either speaker to reflect on the new phrase that's coming into being - that we often make the perfect the enemy of the good. Since the Environmental Policy Act of 1970, we've been worrying about how to get on top. But is there progress being made about reconciling the perfect and the good?

Answer: I think there is. It comes with this kind of collaborative decision-making process, where people work together, as opposed to just the agencies making decisions - this way you come up with much better decisions. Taxpayers care about how their money is being spent; they will make rational decisions.

Question: What is the strategy for risk communication at Rocky Flats these days?

Answer: I believe the strategy is to be open and honest in communication and to make the process very transparent so that you overcome some of the past secrecy credibility problems. This group is very much a part of that.

Question: It's interesting - the idea of outrage as a factor in the public's evaluation of risk. Can you say something more about it? Some of these things don't seem like outrage but rather something else.

Answer: They're things that may cause outrage. It's a general term that is used. These factors are the things that affect how people feel about the risk.

Comment: It seems as if you're looking at two separate aspects - risk assessment and communication. I'd like to voice a concern that you see risk assessment as a hard science, when on occasion it's a more softer science. I feel the communication has a harder edge to it. The science is probably not more than a pseudo-science. About four or five years ago, the risk for the space shuttle had a 10^{-2} , last week it was reviewed it is more like 1-in-131

after analysis of the actual experience. Why should we trust any of the numbers?

Response: That's part of the risk communication error. I worked on the shuttle program, and we knew a risk for a portion of the flight was about 1-in-100. So the entire mission had the larger number, but for that very short portion of 1-1/2 minutes, it was like 1-in-100. But that message never got out - that wasn't part of it. The communication was never there that said there was a very high risk for this short segment of the flight.

Question: When you're speaking of the risk of 3-in-a-million, some people translate that to mean the population of the Denver metro area, that 6 people are going to die from exposure. Other people think that means one individual has 3-chances-in-a-million of developing cancer. Which is the proper way to interpret that?

Answer: We're talking about probability, about the likelihood - we're not saying it will happen. That is described in a ratio, say one-in-a-million. It is accurate to say that a person who was exposed, there is that probability that they run the risk of one additional cancer in a million lifetime risk, over and above the normal background risk, which is 1-in-4, so 250,000 in a million, which is the probability of getting cancer just living in the U.S. Another way to describe it is to draw a million dots, and say the increased risk - draw a circle around the 250,000 dots - the lifetime additional risk is one more dot.

Question: Given that a large number of people on the board get this information and have to pass this on to the public, but most are not technically oriented to risk assessments, what would you give as advice to communicate to other people what they learn about risk from Rocky Flats?

Answer: First is to ask what do people want to know about. Generally, people want to know, is it safe. That's the question you have to address first. I would not do that in numbers. But remember, if nobody's exposed, they're not at risk. Are these people that could be exposed? If not, it's safe.

Question: When you're speaking to people about Rocky Flats, and they are coming from that point of view, how do you pull them into a realistic way of looking at an issue?

Answer: First, you need to acknowledge their concern. Don't start by saying, you don't need to worry about it. It discounts people's fears. Then it's a good idea to go through what the Board is doing, all the material you're reviewing. Make information available to them, and make sure they know they can call on you at any time. People appreciate the opportunity to come to an understanding, and if they're motivated they will.

Comment: I'm concerned about the idea that risk is not an exact science, and the numbers are sort of made up - you have to make some leaps of faith. Especially when you're talking

about low-level radiation over time, the extrapolation is based on somebody's best guess. This is what the Health Advisory Panel is using to try to do the dose reconstruction. I know HAP is doing a lot of hard work and I'm not discounting that - but if risk assessment is so problematic, why is it the pinnacle that we're searching for in dealing with these studies? Why don't we get it from the public that there is a paradigm shift, that these outrage factors, the more subjective/qualitative pieces of this kind of work are in, is not only there, it's appropriate. When we had our first tour of Rocky Flats, a comment was made some activity had to be taken because the public didn't trust what was being said, and they had to spend \$30,000 extra dollars. I said, good, if we can spend \$30,000 and help people feel like they're being heard, that is a really good bargain.

Question: In my experience the two toughest challenges in risk communication are first, how to talk about risks that are low probability but high consequence. Some are dismissed because they are preposterous, others make us really afraid on a day-to-day basis if you really think about it. Most of the tough ones are somewhere in between. Since as a member of the public I'm not sure how I think about it, it makes it much harder as a communications person to figure out how to communicate about it. Second question, an issue I've found is so much of risk communication is about trying to convey simply the issues or situations that are profoundly uncertain and imprecise. When I get technical people and ask them to tell me what I can say about this, finally when I get them all to agree I've got a paragraph that is so technical I don't know what to do with it.

Answer: The one thing you can do is acknowledge just what you've acknowledged. Be absolutely honest as you communicate to the public - this is very complicated and I've talked with technical people and they have given me this explanation, but I'm going to do the best I can with it. Or you can say, I don't even know how to deal with this in my own life, I know this is hard. I don't think there's a thing wrong with being human as you talk about these things, and letting people know that these are difficult things to communicate and you're going to do the best they can, and you care that they ask you about it.

BOARD DISCUSSION - ROCKY FLATS ACCELERATED SITE ACTION PROJECT RECOMMENDATIONS AND COMMENTS / LETTER REQUESTING ASAP2 SCENARIOS DATA (Eugene DeMayo): This recommendation from the Site Wide Issues Committee, which is to be forwarded to DOE/RFFO, transmits preliminary comments on ASAP. The comments both point out some positive aspects of ASAP and note general concerns such as regulatory relief, cost, environmental protection measures, buffer zone issues, monitoring responsibilities, on-site disposal, and risk levels. In addition, the committee suggested sending a letter to Mark Silverman requesting data on ASAP2 scenarios.

Recommendation: Approve recommendation on ASAP.

Action: Motion to accept. APPROVED BY CONSENSUS.

Recommendation: Approve sending letter requesting ASAP2 scenarios data.

Action: Motion to accept. APPROVED BY CONSENSUS.

BOARD DISCUSSION - WASTE MANAGEMENT PEIS (Susan Johnson): The Site Wide Issues Committee prepared a document for CAB approval which included: nine specific recommendations on the draft Waste Management PEIS, requests for clarification of statements in the PEIS, and a recommendation for a comprehensive national dialogue on waste. Public comment on the PEIS is due February 19. Several CAB members expressed concerns with issues and language in the recommendation. After a lengthy discussion, the Board was unable to reach agreement.

Recommendation: Board members who have issues with the proposed recommendation will forward their ideas to the CAB office, and/or attend the Site Wide Issues Committee meeting on February 5. A revised recommendation will be drafted, and the Board will review it at its retreat to be held February 18.

Action: Motion to accept. APPROVED BY CONSENSUS.

BOARD DISCUSSION - HEALTH SUBCOMMITTEE ACTIONS / RECOMMENDATION ON CAB INVOLVEMENT IN COMMUNITY NEEDS ASSESSMENT (Beverly Lyne): The Health Subcommittee forwarded a recommendation suggesting a role for CAB's involvement in the Community Health Initiative, which includes formation of a separate Health Committee to work on the project. CAB will provide informal, independent citizen input into the project and receive regular updates from the committee. Minimal staff involvement is expected.

Recommendation: Approve recommendation on CAB involvement in Community Needs Assessment. One minor change to the wording was suggested.

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

PUBLIC COMMENT PERIOD:

Comment: Frank Smith: I'm concerned about the PEIS recommendation's first full paragraph. It is the words about national scope and national problem which bothers me in the following way. I would like to see the Rocky Flats Board recognizing that it's working on a Rocky Flats problem. Indeed, Rocky Flats is quiet, it is not generating any more radionuclides. It is also true that there are several feasible sites in Colorado under study which might give some relief to either the uncertainty or the volume capacity at WIPP. I

would much rather see your focus be sharpened on Rocky Flats, not on some heartfelt concern about the national problem. In fact, the waste and disposal and disposition problem is truly unique to each site in the complex.

CAB BUSINESS:

Environmental/Waste Management Committee Plans and Progress (Tom Gallegos): Tom gave an update on where the committee is going and gave a report on liquid stabilization progress. The team completed draining a few tanks, continue with draining others that are scheduled. The caustic waste treatment system is about ready. Operators are going to LANL for training, and they do not foresee any interruptions. The committee is developing cleanup standards and principles; representatives from DOE, EPA and CDPHE have provided information on RFCA cleanup standards. The committee continues to collect information and is receiving reports from committee members on background contaminant levels, a contaminant data base, and other aspects.

Membership and Term Issues: According to CAB bylaws, members must be appointed for terms of either four, six or eight years. A proposed approach for establishing those terms was recommended to the Board.

Recommendation: Approve proposal for establishing terms, and select terms at the February 18 Board retreat.

Action: Motion to accept. APPROVED BY CONSENSUS.

Other Issues:

--There was a brainstorming session on ideas for future meeting presentation topics, which included: basic terms and arithmetic; radiation; radiation risk; RFCA/Vision negotiations; plutonium PEIS; fate and transport of plutonium; interrelationships of programs/assessments; geology and mineral rights; surface water management plan; environmental monitoring; state's emergency response plan; budget levels and impacts; FY98 budget proposal; other SSAB issues and actions; potential accidents and impacts; Congressional update on the complex.

--Erin Rogers discussed upcoming Rocky Flats decisions and meetings that CAB should be aware of over the next few months, including: plutonium PEIS; RFCA work-out session and release of draft; Grumbly decision on plutonium storage at Rocky Flats; FY98-02 budget; and draft Site Wide EIS.

NEXT MEETING:

Date: March 7, 1996, 6:00 - 9:30 p.m.

Location: Westminster City Hall, Multi-Purpose Room

Agenda: Presentation: Rocky Flats Environmental Monitoring Program; update on RFCA; 1996 CAB work plan issues

ACTION ITEM SUMMARY: ASSIGNED TO:

- 1) Forward recommendation on ASAP - Staff
- 2) Forward letter requesting ASAP2 scenarios data - Staff
- 3) Forward comments on Waste Management PEIS to staff by 2/5/96, or attend Site Wide Issues Committee meeting on that date - Board members
- 4) Revise Waste Management PEIS recommendation; bring back to CAB at 2/18/96 Board retreat - Site Wide Issues Committee

MEETING ADJOURNED AT 9:30 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](#)