

**RFCA Stakeholder Focus Group**  
**January 3, 2001**  
**Meeting Minutes**

**INTRODUCTION AND ADMINISTRATIVE**

A participants list for the January 3, 2001 Rocky Flats Cleanup Agreement (RFCA) Stakeholder Focus Group meeting is included in this report as Appendix A.

Reed Hodgkin of AlphaTRAC, Inc., meeting facilitator, reviewed the purpose of the RFCA Focus Group.

The meeting agenda included:

- RSAL Schedule Review Update
- RSAL Peer Review Update and Discussion
- New Science Briefing and Discussion
- Industrial Area Sampling and Analysis Plan - Briefing and Discussion

Reed asked the Focus Group if there were any changes or additions / corrections to the December 13, 2000 meeting minutes. One correction was noted:

- On page 3, the text reads  $10^{-4}$  where it should read  $10^{-6}$ .

A Focus Group member asked that issues and questions be kept track of, then listed in future minutes as a separate item, with corresponding report / answer attached to the meeting minutes. AlphaTRAC, Inc. stated they have a database in progress, and will update that and include as part of the packet in the meeting minutes.

Members of the Focus Group asked that the RFCA Agencies resume their periodic report-backs to the focus group on how the group's input is being used in cleanup decision-making.

Joe Goldfield asked for a status on DOE responses to the papers he had submitted several months previously. Reed stated he had informed DOE of Joe's request and referred Joe to DOE for further input.

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## RSAL SCHEDULE REVIEW UPDATE

The RFCA agencies gave updates on the tasks of the RSALs review reports.

### Task One: Regulatory Analysis

- The schedule for draft 2 of the regulatory analysis schedule has slipped by approximately two weeks
- The second draft will clearly articulate risk and dose approaches

### Task Two: Model Evaluation

- The comments on draft 1 of the Model Evaluation report were not extensive and the revision of this report is straight-forward
- The author is on path to second draft within a few days
- An issue to be tracked is NRC's validation / review of the RESRAD Version 6.0

### Task Three: Parameter Evaluation

- A detailed schedule for Task Three will be available after the RSAL Working Group meeting of January 4, 2001

### Task Four: New Science

- The results from the wind tunnel experiments of resuspension after Buffer Zone fires are now available and a preliminary briefing will be presented tonight

### Task Five: Cleanup levels at other Sites

- There is no change in the status of this task

A member of the focus group asked if progress was being made on the RSAL review or if the schedule slips were an indication of lack of progress. DOE stated that substantial progress was being made against a very aggressive schedule. EPA noted that the slip in the schedule for the Regulatory Analysis report would not affect the critical path of the project. CDPHE indicated that the work was moving along. A member of the focus

group emphasized the importance of staying on schedule in order to meet the schedule for the peer reviewers.

The focus group asked for the source code for RESRAD 6.0. DOE agreed to obtain and provide the source code.

It was noted that differences between RESRAD versions were discussed in the RAC report. The focus group asked for a reference to the location of that discussion in the RARC report. Victor Holm agreed to provide the indicated reference.

A member of the focus group indicated that knowing the sensitivity of the modeling results to differences between RESRAD versions could be as or more important than knowing the differences themselves. It was suggested that RAC's experts be brought in to discuss this topic with the focus group. The agencies replied that the sensitivity of model results to model differences would be included in the RSAL review documentation.

A member of the focus group asked for clarification on the current schedule for the RSAL Review reports. The agencies replied:

- Draft 2 of Task 1 report: Two weeks
- Draft 2 of Task 2 report: Mid-January
- Draft 1 of Task 3 report: One to two months, but may slip
- Draft 1 of Task 4 report: A new primary investigator has been assigned to write report

A member of the focus group asked who is controlling the Task 3 (Parameter Evaluation) Working Group. DOE responded that the group is being led by EPA and Kaiser-Hill, with some support from DOE.

## RSAL PEER REVIEW UPDATE AND DISCUSSION

Reed introduced the RSAL Peer Review Update and Discussion with the following objectives for the session:

- Summarize status of peer reviewer selection
- Determine key questions for peer review of Task 1 (Regulatory Analysis) report

- Determine topics for first workshop
- Set the Date for first workshop.

### Summary of Peer Review Selection Status

Reed updated the group on the status of the Peer Review process. He indicated that he had made contact with and interviewed candidate peer reviewers for Task 1 - Regulatory Analysis. Two candidates have agreed to participate and find the terms and honoraria acceptable. AlphaTRAC, Inc. is now working to establish subcontracts with the selected peer reviewers.

### Key Questions for Peer Review of Task 1 (Regulatory Analysis) Report

The next topic addressed was key questions to be submitted to the peer reviewers for the Task 1 (Regulatory Analysis) report. Reed indicated that eleven peer review questions (Appendix B) had been received from members of the focus group and included in the packets for this meeting:

- Is the NRC rule, which was intended to cover facilities quite different from Rocky Flats (e.g. primarily facilities using radionuclides with short half lives), unequivocally an ARAR?
- Is it appropriate to apply ARARs piecemeal?
- Do the regulations offer guidance on how to account for catastrophic events?
- Has CERCLA cleanup been addressed in federal court? Specifically, is there any judicial precedent in which regulators have been forced to consider exposure scenarios more conservative those deemed to be "reasonably anticipated?"
- What does the National Contingency Plan require re. cleanup of CERCLA sites? More specifically, what does it require re. risk?
- CERCLA risk range, EPA 15/85 mrem/y, and NRC 25/100 mrem/y: Do the dose levels proposed by EPA in their withdrawn rule (used in calculating the 1996 RSALs) and those recently adopted by NRC correspond to CERCLA?

- To be assured of compliance with CERCLA, would it be better to begin with the CERCLA risk range ( $10^{-4}$  to  $10^{-6}$ ) and back calculate to an RSAL that meets the CERCLA risk range?
- I believe the Agencies propose to conduct a risk-based assessment and a dose-based assessment simultaneously; will not convert dose to risk; and will apply the ALARA analysis after the RSAL determination has been made to determine whether it is feasible to cleanup to more stringent levels. I interpret this to mean that the RSAL value will be protective within the 1 in 10,000 cancer risk and the 100 mrem dose/year (without institutional controls). The ALARA analysis will then be used to determine whether it is economically feasible to reach the 1 in 1,000,000 cancer risk and/or the 25 mrem maximum dose in a year (without institutional controls). If I am correct, I expect the peer reviewers to examine carefully whether this is acceptable under CERCLA and EPA Headquarters.
- Define the process of incorporating ARARs, specifically the NRC rule, into the decision making process for determining clean-up standards for a CERCLA remediation site. If possible, generate a decision tree to include decision points identifying regulatory drivers with the key decision parameters that analyzes the implementation process and the effectiveness of choosing a standard which sets good controls to protect human health and the environment.
- Identify any guidance or other documents that may provide support to the decision making process associated with risk vs. dose.
- Identify how long-term stewardship relates to the process of selecting a standard that is to be cost-effective and utilizes permanent solutions and/or alternative treatment technologies or resource recovery technologies to determine clean-up standards.

He asked the group if there were any additional peer review questions to be considered. Three further questions were offered:

- Have the regulators done a good job of identifying court cases that set precedents?

- Evaluate the criteria used for setting limits on the effects of radionuclides on exposed citizens; should the dose be 15 mRem, 25 mRem, or whatever?
- What is the validity of the risk factors developed for the various health doses measured in mRem?

Reed indicated that perhaps four or five key questions could be forwarded to the reviewers, given the level of effort that could be expected in the review. He told the focus group that there were two options:

- Select or craft four or five key questions from those submitted and ask the peer reviewers to respond to them specifically, or
- Submit all of the questions and invite the peer reviewers to respond to those they wish.

Reed indicated that the questions should be focused on review of the draft Regulatory Analysis report, rather than asking for analysis of new issues. Any requests for additional regulatory analysis should be submitted to, and addressed by, the RFCA Agencies.

A focus group member noted that many of the questions proposed for the peer reviewers might actually be answered in the next version of the Regulatory Analysis report. After further discussion, the group decided on a new approach to submitting questions for the peer review:

- Draft 2 of the Regulatory Analysis report will be submitted to the focus group and to the peer reviewers as soon as it is ready (expected in approximately 2 weeks),
- The peer reviewers will be notified that specific questions will be submitted to them by a specific date,
- The members of the focus group will develop suggested peer review questions (which may include some of the ones already submitted) and share the questions with each other,
- At the next focus group meeting following issuance of the draft Regulatory Analysis report, the focus group will choose a set of questions to submit to the peer reviewers,

- The "clock" for the peer review will begin ticking when the peer reviewers receive the review questions from the focus group.

### Regulatory Analysis Discussion

During the discussion of the Regulatory Analysis Peer Review, the focus group engaged in a discussion on the regulatory framework for RSAL development, with a focus on the land use scenarios being developed as part of Draft 2 of the Regulatory Analysis Report. The group decided to defer the presentation and discussion of the New Science findings until the next focus group meeting in order to make room on the agenda for the expanded discussion. It was requested that such agenda changes be made as early as possible in the future, so that deferred presenters could leave the meeting. Reed agreed to make this part of the process for future meetings.

A member of the focus group asked if the RFCA agencies were setting a precedent by using the NRC rule as an ARAR. The agencies responded that a precedent was not being set - for instance, both Brookhaven National Laboratory and the Oak Ridge National Laboratory had already used the NRC rule in their cleanups.

The EPA indicated that the regulatory analysis would involve modeling evaluations of four land use scenarios against four risk / dose thresholds. Thus, sixteen candidate RSAL values would result and be considered together to develop a final number. CDPHE indicated that the four risk / dose thresholds being considered are:

- $10^{-4}$  risk,
- $10^{-5}$  risk,
- $10^{-6}$  risk, and
- 25 mrem dose.

CDHPE also indicated that the four land use scenarios being considered are:

- Wildlife refuge worker,
- Commercial user,
- Open space user,
- Unrestricted user.

The RFCA Agencies were asked if the resident rancher scenario was included in the evaluation and if it would be considered as a basis for the RSAL or as a target for ALARA. CDPHE and EPA answered that the Unrestricted user scenario had not yet been fully defined and that the resident rancher scenario was a possibility for that category. CDPHE confirmed that, as had been stated in previous focus group meetings, the RFCA Agencies were planning to apply the unrestricted use scenario as a target for ALARA rather than a candidate for the RSAL number itself.

Some members of the focus group expressed concern and displeasure that the resident rancher scenario was not being used to drive the RSAL value. One felt that the work of the RSALs Working Group was being invalidated. Another felt that the most conservative use of the land that could be conceived of (resident rancher) should be used as the basis for the RSAL in order to best protect future generations. The EPA replied that Congress had given a clear response to EPA in previous CERCLA cleanups that it would not approve funding for cleanups to unrestricted use. This is why the RFCA agencies are planning toward a cleanup to "anticipated use" with unrestricted use as an ALARA goal.

The focus group agreed to continue their discussion of land use scenarios at the next focus group meeting. EPA agreed to present the approach from the revised regulatory analysis report as a kickoff for the discussion.

### Topics for RSAL Review Workshops

The focus group held a brief discussion on the topics for the upcoming RSAL Review Workshops. A number of workshop topics had been suggested, including the RESRAD model, input parameters, sensitivity analysis, and dose factors / risk curves. It was suggested that objectives should be established for the workshops before deciding the specific topics. The group decided to share ideas for workshop objectives offline and continue the discussion at the next focus group meeting.



## Topics for the Modeling Workshop

Reed opened the discussion by stating that a large number of suggested topics had been submitted for the first (Modeling) workshop, all centered on the RESRAD model. He indicated that it was clear that the focus of the workshop would be RESRAD.

He further indicated that the suggestions could be summarized as seven topics:

- Basis for RESRAD
- Application of RESRAD in RAC study
- Changes to RESRAD and effects
- Risk / probability in RESRAD 6.0
- Parameters chosen for RESRAD
- Applicability to RFETS
- Ground and surface water in RESRAD.

The group discussed whether the workshop should be oriented toward a technical audience or toward the general public. The possibility of holding two sessions - a technical session during the day and a public session in the evening was considered. The group agreed to continue their discussion at the next focus group meeting.

## Date for the First Workshop

Reed indicated that March 2001 would probably be the earliest that the first workshop could be held from a planning and logistics perspective. The group decided to set a date for the workshop when they had decided on format and content. The availability of presenters from RAC and Argonne National Laboratory would be a consideration.

## ANNOUNCEMENT

Joe Legare, DOE, made an announcement that Ken Brakken will be replacing Paul Hartmann as the DOE contact for the RFCA Focus Group.

## SITE CHARACTERIZATION AND REMEDIATION STRATEGY

Reed introduced the presentation by setting objectives for the session:

- Describe the overall strategy for characterization and remediation,
- Summarize the elements of the IASAP,
- Show how RFETS will ensure that no contamination is left behind.

Lane Butler then gave a presentation on the site characterization and remediation strategy, with a focus on the Industrial Area Sampling and Analysis Plan (IASAP) (see Appendix C for a copy of the presentation materials). His presentation addressed the following topics:

- Characterization approach,
- Remediation approach,
- Subcontract strategy,
- Schedule, and
- Current status.

A brief discussion session followed the presentation.

A member of the focus group asked about the status of the IASAP. CDPHE indicated that the agency had submitted comments before Christmas and that it was expected that the plan would be approved during the next week.

A member of the focus group asked about calibration of the field samples. Lane summarized the quality assurance program for field sampling and for laboratory analysis.

A member of the focus group asked about definition of groundwater plumes. Lane answered that groundwater was not included in the IASAP, but that the existing network of wells would be used to define groundwater plumes, with additional wells added if needed.

A member of the focus group asked how contamination would be addressed under foundation pads. Lane answered that pads would be pulled up for certain buildings where under-building contamination was expected (such as Building 771). At other buildings sampling would be conducted through the pads to determine if contamination exists or not.

## AGENDA ITEMS FOR NEXT MEETING

The focus group agreed on the following topics for the January 17, 2001 meeting:

- New Science outline and wind tunnel detail discussion
- Model workshop objectives and topics
- Land use scenarios discussion

## ADJOURN

The meeting was adjourned at 6:30 p.m.

Christine reminded the Focus Group that the January 17, 2001 RFCA Focus Group will be held at the Arvada City Hall, 3:30 to 6:30 p.m.

## SUMMARY OF ACTIONS AND COMMITMENTS

- The focus group asked for the source code for RESRAD 6.0. DOE agreed to obtain and provide the source code.
- Location in RAC report where RESRAD code differences are addressed
- Issues / questions raised from each meeting listed in the meeting minutes
- New schedule for RSAL review with changes bolded
- Formal report on agency feedback regarding Focus Group input

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**Appendix A  
Participant's List**

**Appendix B  
Key Questions To Peer Reviewers For The Task 1 (Regulatory Analysis)  
Report**

**Appendix C  
Site Characterization And Remediation Strategy**

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