Rocky Flats Citizens Advisory Board Recommendation 2003-3

Comments and Recommendations on Appendix I, Demolition Plan, of the Building 776/777 Decommissioning Operations Plan

Approved June 5, 2003

Letter to:
Mr. Gene Schmitt, Manager
U.S. Department of Energy
Rocky Flats Field Office
10808 Highway 93, Unit A
Golden, CO 80403

Mr. Steve Gunderson
CDPHE
4300 Cherry Creek Drive South
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Mr. Tim Rehder
U.S. EPA
999 18th Street, Suite 500
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Dear Mr. Schmitt, Mr. Gunderson, and Mr. Rehder:

The Rocky Flats Citizens Advisory Board appreciates the opportunity to review Appendix I, Demolition Plan, of the Building 776/777 Decommissioning Operations Plan, and offers the following comments and recommendations:

1. Decontamination of Highly Contaminated Interior Walls

During the informal comment period, the RFCAB Closure Projects Committee raised the issue of demolishing a highly contaminated interior wall inside localized containment. The purpose would be to demonstrate the effect of such activity on air quality and potential worker exposures. Therefore, we were encouraged to learn on May 1 that the B771 project has already performed this kind of test on an interior wall in that building and that the B776/777 project will be evaluating the results for work planning purposes.

RFCAB would like to be informed of how these results will be applied to planning for the demolition of B776. Depending on the outcome of the B771 demonstration, RFCAB believes there may be value in conducting tests of contaminated, non-load-bearing walls inside B776 as well and that this data should be used to evaluate the path forward on highly contaminated load bearing walls.

2. Selective Removal under Localized Containment

RFCAB understands that the demolition plan mentions removal of high contamination found in ceilings and walls, but RFCAB believes the demolition plan should more clearly state this as a project goal. In principle, RFCAB supports selective removal of high contamination embedded in non-load-bearing walls, both interior and exterior as well as ceiling and roof, prior to demolition, if it can be done safely. The site should also consider doing such work under localized containment, as in the B771 test in number 1 above, if feasible.

3. Close-in Air Monitoring

RFCAB feels the demolition plan should clarify the site's commitment to do close-in real time air monitoring as well as more sensitive monitoring within and surrounding the B776 project boundary. This would include, but not necessarily be limited to, air sampling performed using work area air samplers, lapel air samplers and portable alpha analyzers. Site managers have stated that worker health and safety monitoring will also provide immediate feedback to the project on whether releases to the environment are being kept as low as reasonably achievable. Therefore, RFCAB believes it is appropriate to include this type of monitoring in a CERCLA decision document.

4. Protection of Collocated Workers

The demolition plan states an objective of limiting project emissions such that a member of the general public receives no more than 1% of the 10 mrem dose allowable for radionuclides under the National Emission Standards for Hazardous Air Pollutants. The plan should also describe:

- The emissions objective for protecting collocated workers
- The specific measures that will be taken in order to meet this objective, to include a radiological buffer zone established in downwind areas to minimize worker exposures
- An early warning system for protecting collocated workers
- How the Site plans to achieve ALARA

5. Wind Speed Criteria

The wind speed criteria in the demolition plan appears to be no different from that used to govern work activities elsewhere on site. Since this project is a special case, the demolition plan should give consideration to using lesser wind speeds as work stoppage criteria for B776. It should be demonstrated that the emissions controls being employed on the project are protective up to the wind speed criteria ultimately chosen.

6. Explosives

At the May 1 RFCAB meeting, project managers stated that they may seek approval from CDPHE for limited use of explosives in B776 for such purposes as concrete footings and thick walls that have been decontaminated to meet unrestricted release criteria, etc. If this is the plan, the public should have a chance to comment on it. RFCAB recommends that the plan add clarifying language stating what the explosives would be used for. The commitment should also be made that no explosives will be used for overhead pipes in this building. Where explosives are being contemplated as a means to soften thick concrete walls, the site should explore alternative approaches such as Cardox, a compressed gas that may be useful for this purpose.

7. Waste Pile Management

The plan states that "limitations on waste piles will be established to ensure that building rubble is containerized in a timely manner." These limitations should be more clearly described in the document, including the maximum number of piles, the maximum volume and specific time limits. The plan should state that the site will use direct-loading of waste into containers to the extent feasible. It must be assured that the waste piles will not exceed a size that can be controlled via the dust control methods being proposed and demonstrated in number 5 above. It must also be assured that the waste piles will not exceed a volume whereby precipitation overland flow can be controlled using secondary containment.

8. Shutdown Authority

The plan should clarify who has project shutdown authority (both entities and personnel) and the criteria by which it would be exercised.

9. Characterization

- There must be independent review (IVV) of the final building characterization.

- Although the characterization strategy has yet to be finalized, the demolition plan should at a minimum commit to additional core sampling and investigations of other inaccessible areas, and to additional sampling for contamination embedded in non-load-bearing walls. If contamination is found in non-load-bearing walls, the site should either remove it prior to demolition or justify why it cannot be decontaminated or removed.

Such sampling needs to include other contaminants besides radionuclides, such as beryllium. All of the above would reduce both uncertainties and public concern associated with unidentified contamination in the building.

We hope that you are able to address these issues in the final Building 776 Demolition Plan and look forward to hearing your response.

Sincerely,

Victor Holm
Chair

cc: Richard DiSalvo, DOE
John Schneider, DOE
Mark Ferri, Kaiser-Hill
Dyan Foss, Kaiser-Hill
Rocky Flats Coalition of Local Governments

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.