

VRANESH AND RAISCH

ATTORNEYS AT LAW

1720 14TH STREET, SUITE 200

P. O. BOX 271

BOULDER, COLORADO 80306

TELEPHONE 303/443-8151

TELECOPIER 303/443-9868

JERRY W. RAISCH
JOHN R. HENDERSON
MICHAEL D. SHIMMIN
EUGENE J. RIORDAN
PAUL J. ZILIS

GEORGE VRANESH (RETIRED)

BRIAN M. NAZARENUS
DOUGLAS A. GOULDING
RAY ANN BRAMMER
GREGORY J. CLIFTON

November 21, 1990

Beth Brainard
Public Affairs Officer
Rocky Flats Office
U.S. Department of Energy
Post Office Box 928
Golden, CO 80402-0928

Re: Proposed Surface Water Interim Measures/Interim
Remedial Action Plan -- 903 Pad, Mound, East
Trenches Areas (Operable Unit No. 2)

Dear Ms. Brainard:

At the outset, Broomfield wants to thank you for giving it the opportunity to comment on the Proposed Surface Water interim Measures/Interim Remedial Action Plan for the 903 Pad, Mound, and East Trenches Areas (Operable Unit No. 2) (hereinafter "IRA Plan"). Broomfield supports clean up efforts at the Rocky Flats Plant ("RFP"), including efforts like those described in the IRA Plan that are directed at cleaning up contaminated surface water. Broomfield does not, however, fully embrace the IRA Plan for a number of reasons. First, the proposal is likely to be implemented before Broomfield's drinking water reservoir -- Great Western Reservoir -- is fully isolated from the RFP. And second, the proposal fails to recognize that bench and pilot scale studies should drive the selection of the alternative and not the selection of the action levels.

A. ISOLATION OF GREAT WESTERN RESERVOIR FROM THE RFP

As discussed in the "Consolidated Comments of the Cities of Broomfield, Thornton, Northglenn, Westminster, and Arvada on the Environmental Restoration and Waste Management Site-Specific Plan -- Rocky Flats" dated September 28, 1990 (attached), the remediation efforts at the RFP should not take place until Standley Lake and Great Western Reservoir are fully isolated from the RFP. With the cooperation of all interested parties, an isolation project consisting of "Option B" plus "Option J" was formulated to achieve that risk reduction goal. "Option B" involves diverting the Standley Lake basin runoff into Great Western Reservoir and replacing Broomfield's existing Great Western Reservoir system with new water rights, a new reservoir,

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and a new treatment plant. "Option J" involves water management at the RFP to control contamination at the source. Without this package in place, Standley Lake and Great Western Reservoir remain at risk to further contamination resulting from the implementation of the IRA Plan -- a risk that Broomfield cannot tolerate.

The specific threats to Great Western Reservoir from the actions proposed in the IRA Plan include the following:

1. The trench and sump installations will require a disturbance of potentially contaminated soils and, presumably, a wasting of the excess soils on-site. Additionally, it is likely that the installation of the treatment systems will also disturb potentially contaminated soils. Since the flows from high precipitation events are not being controlled and since there is no proposal for preventing wind dispersion of these potentially contaminated soils, they could wind up in Walnut Creek and ultimately Great Western Reservoir. Similarly, Broomfield is concerned about the potential for migration of the hazardous chemicals at the treatment plant that will be used in the treatment process, and the treatment plant residuals.
2. The proposal fails to describe in detail the erosion control measures that will be in place to prevent downstream water quality problems. In addition, the proposal fails to suggest that these erosion control measures will be maintained throughout the life of the collection and treatment system.
3. The proposal fails to describe in detail how the debris collected in the sumps is to be cleaned out periodically.
4. The truck transportation proposal is not particularly appealing. If the truck fails and seep water ends up on Indiana Street, it will flow from there either to Standley Lake or Great Western Reservoir.
5. The proposal actually increases the contamination loading of Walnut Creek. Discharge from the system will go into Walnut Creek even though the inflow is from both Woman and Walnut Creeks. This is significant because the data suggests that Woman Creek has higher concentrations of radionuclides. If the system does

not work (and this is a real possibility since treatment systems have not been demonstrated to be very effective for removing radionuclides) operation of that system will actually contaminate Walnut Creek instead of cleaning it up. Obviously, Broomfield cannot tolerate such a result. Perhaps the contaminated water from Woman Creek should not even be treated in the proposed system but should instead be treated at the existing RFP process waste facility.

6. The proposal does not provide for an effluent holding tank to ensure that the effluent meets the action levels prior to discharge into Walnut Creek.

In sum, Broomfield objects to the additional loading of Walnut Creek unless and until its Great Western Reservoir is fully isolated from the RFP. Otherwise, the risks of additional contamination of Walnut Creek are increased. These risks are real and EPA has, on other occasions, recognized them. One concern EPA has expressed is that if there is a release from the RFP during remediation efforts, the presence of the diversion ditch around Standley Lake proposed in "Option B" might extend the contamination beyond Standley Lake. Implicit in this concern is that there is a real potential for a release during the remediation activities. What is not clear, however, is why it is okay to sacrifice Standley Lake or Great Western Reservoir and not the South Platte River. Obviously, neither should be sacrificed. A zero-discharge system should be operational before any remediation takes place. At the very least, Broomfield is insisting that the First Steps Package of "Option B" be in place before any remediation takes place. Indeed, if there is "no immediate threat to public health and environment" as the IRA Plan indicates, see IRA Plan at EX-1 (emphasis added), it would appear that there is no legitimate reason for proceeding with the work until Great Western Reservoir is fully isolated from the RFP.

B. USE OF BENCH AND PILOT SCALE STUDIES

Broomfield's other concern about the IRA Plan is the proposal to select an alternative without first completing bench and pilot scale testing. It is true that the IRA Plan acknowledges data gaps (e.g., the distribution and magnitude of the contamination needs better delineation, IRA Plan at 2-39, the flow data is based on a relatively short time period, IRA Plan at 4-11 to 4-15; and "[o]nly a small fraction of the data have been validated," IRA Plan at 2-39), and recommends treatability

studies before full-scale operation. Interestingly, the treatability studies appear to be proposed for the purpose of justifying a deviation from the ARAR'S instead of a fine tuning of the treatment system to accomplish the objectives of the IRA Plan. Broomfield believes that this is inappropriate. The pilot studies should be used to evaluate the performance of the preferred alternative. If the preferred alternative won't do the job, one of the other target alternatives should be evaluated. We should not just throw up our hands and say "oh, well" the ARAR'S can't be met.

This seems especially true in this case since there is no analysis of whether treating the low flows is going to be effective. It may well be that the contaminants are effectively flushed out only during storm events. Perhaps a better approach would be to design the system to treat the average maximum seep flow resulting from a five or ten year design storm event.

In short, the final selection of an alternative is premature since the field treatability studies have not even started. The pilot scale studies should be evaluated before proceeding with full scale operation. Indeed, it seems incongruous to schedule construction of a full scale system without first evaluating the pilot scale studies. How many times have pilot plant operations revealed that laboratory bench scale results can not be duplicated in the field? Additionally, since the IRA Plan indicates that there is "no immediate threat to public health and environment," IRA Plan at EX-1 (emphasis added), there should be no reason to gear up for full scale treatment until the pilot studies have been completed and evaluated.

Broomfield believes, therefore, that the pilot scale studies should proceed, and that the final preferred alternative should be selected after these studies are completed and evaluated. As the IRA Plan indicates, this final preferred alternative will require approval by the regulatory agencies. It goes without saying that the public should be involved in this decision as well. Broomfield requests that it be allowed to review the pilot scale results, the final preferred alternative, the proposed ARAR's, and the proposed action levels.

As a final comment, it seems that the proposal is not economically justified. The price tag is quite high and the proposed remediation technology:

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- a) is not bench or pilot scale tested;
- b) treats a very small amount of water; and
- c) may not meet the ARAR's.

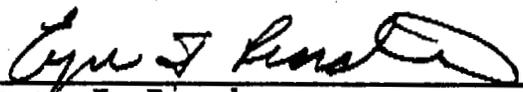
It would appear that the money is better spent isolating the RFP from its neighbors and then implementing remediation activities that truly clean up the site.

Thank you again for providing an opportunity to comment on the IRA Plan. We look forward to the publication of a revised IRA Plan that reflects the comments we have raised and specifically ensures that Great Western Reservoir is fully isolated from the RFP before the revised IRA Plan is implemented. If you have any questions, please feel free to call.

Sincerely,

VRANESH AND RAISCH

By


Eugene J. Riordan
Attorneys for City of Broomfield

EJR/kcm
Attachment
cc w/ attachment: Matt Glasser
George Di Ciero
Kathy Schnoor