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Department of Energy

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DATE

ROCKY FLATS OFFICE  
P.O. BOX 928  
GOLDEN, COLORADO 80402-0928



ACTION

DIST.	LTR	ENC
BENEDETTI, R.L.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
BENJAMIN, A.	<input type="checkbox"/>	<input type="checkbox"/>
BERMAN, H.S.	<input type="checkbox"/>	<input type="checkbox"/>
BARNIVAL, G.J.	<input type="checkbox"/>	<input type="checkbox"/>
BOPP, R.D.	<input type="checkbox"/>	<input type="checkbox"/>
BORDOVA, R.C.	<input type="checkbox"/>	<input type="checkbox"/>
DAVIS, J.G.	<input type="checkbox"/>	<input type="checkbox"/>
FERRERA, D.W.	<input type="checkbox"/>	<input type="checkbox"/>
FRANZ, W.A.	<input type="checkbox"/>	<input type="checkbox"/>
HANNI, B.J.	<input type="checkbox"/>	<input type="checkbox"/>
HEALY, T.J.	<input type="checkbox"/>	<input type="checkbox"/>
HEDAHL, T.G.	<input type="checkbox"/>	<input type="checkbox"/>
HILBIG, J.G.	<input type="checkbox"/>	<input type="checkbox"/>
HIRBY, W.A.	<input type="checkbox"/>	<input type="checkbox"/>
HUESTER, A.W.	<input type="checkbox"/>	<input type="checkbox"/>
HANN, H.P.	<input type="checkbox"/>	<input type="checkbox"/>
HARX, G.E.	<input type="checkbox"/>	<input type="checkbox"/>
HICKENNA, F.G.	<input type="checkbox"/>	<input type="checkbox"/>
HORGAN, R.V.	<input type="checkbox"/>	<input type="checkbox"/>
HZZUTO, V.M.	<input type="checkbox"/>	<input type="checkbox"/>
HOTTER, G.L.	<input type="checkbox"/>	<input type="checkbox"/>
HILEY, J.H.	<input type="checkbox"/>	<input type="checkbox"/>
HANDLIN, N.B.	<input type="checkbox"/>	<input type="checkbox"/>
HATTERWHITE, D.G.	<input type="checkbox"/>	<input type="checkbox"/>
SCHUBERT, A.L.	<input type="checkbox"/>	<input type="checkbox"/>
SETLOCK, G.H.	<input type="checkbox"/>	<input type="checkbox"/>
SULLIVAN, M.T.	<input type="checkbox"/>	<input type="checkbox"/>
SWANSON, E.R.	<input type="checkbox"/>	<input type="checkbox"/>
WILKINSON, R.B.	<input type="checkbox"/>	<input type="checkbox"/>
WILSON, J.M.	<input type="checkbox"/>	<input type="checkbox"/>

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Aug 23 7 15 PM '93  
CORRESPONDENCE SECTION  
ROCKY FLATS OFFICE

Mr. Martin Hestmark  
U.S. Environmental Protection Agency, Region VIII  
Attn. Rocky Flats Project Manager, 8HWM-RI  
999 18th Street, Suite 500, 8WM-C  
Denver, Colorado 80202-2405

Dear Martin Hestmark:

This letter is in response to your July 6, 1993, letter to the U.S. Department of Energy Rocky Flats Office (DOE/RFO) regarding the Draft Human Health Risk Assessment Template developed by the U. S. Environmental Protection Agency, Region VIII. The DOE/RFO believes that a template for the Human Health Risk Assessment can save both time and money for federal and state agencies involved in environmental restoration at the Rocky Flats Plant.

Our comments on the draft template are enclosed for your review and incorporation. We feel it is likely that additional meetings will be necessary to resolve various issues before the template can be finalized. This applies to the Contaminants of Concern, Exposure Scenarios and Toxicity Assessment. We suggest that the Comprehensive Risk Assessment Task Group serve as the mechanism to reach consensus on the remaining issues. Please advise us of your staff's availability to discuss and resolve the outstanding issues.

Questions or concerns regarding this letter and enclosure should be addressed to Bruce Thatcher of my staff at 966-3532.

Sincerely,

*Jim*  
James K. Hartman  
Assistant Manager for Transition  
and Environmental Restoration

Enclosure



CORRES CONTROL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PATS/130G	<input type="checkbox"/>	<input type="checkbox"/>

Reviewed for Addressee  
Corres. Control RFP

8-23-93  
DATE BY *Ci*

Ref Ltr. #

DOE ORDER #

M. Hestmark  
93-DOE-08926

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cc w/ Enclosure:

A. Rampertaap, EM-453  
R. Schassburger, ERD, RFO  
B. Thatcher, ERD, RFO  
R. Benedetti, EG&G  
W. Busby, EG&G  
D. Smith, EG&G  
G. Baughman, CDH  
J. Schiefflin, CDH  
B. Duprey, EPA  
L. Johnson, EPA

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Comments on Human Health Risk Assessment Templates submitted by EPA in June, 1993

o Section 2 - Contaminants of Concern

The COC flowchart as outlined in this chapter needs to be updated to current methodologies. First, the background methodology as outlined is going to be changed through a joint DOE, EPA and CDH workgroup. This change should occur shortly after we receive Dr. Richard Gilbert's recommendations which are anticipated by August 2, 1993. In addition, the evaluation of special case COCs is being closely scrutinized as is the issue of "risk at the source". Finally, the disposition of contaminants not definitively associated with the RFP needs resolution.

o Section 3 - Exposure Scenarios

The DOE RFO has already committed to performing a quantitative evaluation of future on-site residents at OU 1. This may be appropriate for other OUs in the RFP buffer zone. However, it is a very unlikely scenario at OU 7 (present landfill) and the old landfill at OU 5. It is also a very unlikely scenario at all of the industrial area OUs (OUs 4, 8, 9, 10, 12, 13, 14 and 15). There is no statutory or regulatory basis under CERCLA, RCRA nor the CHWA for a quantitative evaluation of future on-site residents. Furthermore, the RFP IAG has no language which requires the evaluation of this scenario. Thus, DOE RFO wishes to reserve the right not to include an evaluation of risk to future on-site residents in the RFP industrial area and several IHSSs within the RFP buffer zone. It is DOE RFO's position that this scenario is not reasonable for various portions of the RFP.

We recommend that the Recreational User scenario should be deleted from the Conceptual Site Model. This scenario is not mentioned in the text and is not an exposure scenario in any OU-specific TMs. Furthermore, the Ecological Researcher scenario is used and is more conservative than the Recreational User scenario.

In the "intake factor" tables, many values are the same for both the RME and AVG cases. This does not meet the intent of EPA guidance. Both RME and AVG values should be developed.

There should be a correlation between body weight and intake (ingestion and inhalation) rate. This correlation is not shown in many of the "intake factor" tables as one goes from the RME values to the AVG values. Also, there should be a correlation between surface area and body weight.

Many of the AVG values cited in the "intake factor" tables are not referenceable. The sources for these values should be referenced.

The dermal adsorption factors and the permeability constants for all chemicals need to be evaluated on a chemical specific basis. Criteria need to be developed for these items in order to specify values for specific chemicals.

o Section 4 - Models

Environmental transport models for volatile organic compounds in the vadose zone to a basement need to be included.

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A sixth criterial should be added for the selection of models. This criteria would evaluate each model within a pathway with respect to sitewide use for the comprehensive risk assessment.

Since the fate and transport model TMs for OUs 5 and 6 were superior to either OUs 1 or 2, we recommend that they be used as a basis for the template.

o Section 5 - Toxicity Assessment

Although the radionuclide dose assessment referenced in chapter 10 of RAGS and in DOE Order 5400.5, Radiation Protection of the Public and the Environment, is not referenced in the RFP IAG under the toxicity assessment technical memorandum, DOE RFO believes it appropriate to include dose conversion factors, etc. in the template. It is noteworthy that DOE Order 5400.5 has been published in the Federal Register as proposed rules under 10CFR Part 834 (Thursday, March 25, 1993).

Since, dose assessment will be an integral part of our risk assessments, DOE RFO believes it to be appropriate to establish ground rules and consistency in this area as well. The Toxicity Template may be an appropriate mechanism to achieve these.

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