

93 RF 6983

# EG&G ROCKY FLATS

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June 16, 1993

93-RF-6983

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DOE, RFO

Attn: S. R. Grace

## OPERABLE UNIT NO. 2 (OU 2) RISK ASSESSMENT SCHEDULE IMPACTS - RLB-271-93

The Operable Unit No. 1 (OU 1) negotiations have impacted the OU 2 schedule for the risk assessment portions of the Draft Phase II RCRA Facility Investigation/Remedial Investigation (RFI/RI) Report. In particular, the OU 1 negotiations have resulted in guidance from the Environmental Protection Agency (EPA) and the Colorado Department of Health (CDH) to perform four risk assessments as follows:

- An OU-wide risk assessment;
- A source area risk assessment that has not been defined;
- Anomaly risk assessments; and
- A non-source area risk assessment based on the remaining data after sources and anomalies are removed.

Operable Units with multiple individual hazardous substances sites (IHSSs) have a higher risk of need for multiple assessments (one or more per IHSS). This is a result of the Interagency Agreement (IAG) requiring an assessment of risk at the source and the fact that "source" is undefined in the IAG and may be interpreted differently between the regulatory agencies. The impact on OU 2 is due to the large number of IHSSs, the larger area covered, and the number of different processes that created the IHSSs. EG&G is preparing a comprehensive proposal to deal with Risk Assessment at all OUs based on the OU 1 negotiations and other technical discussions. The options described in this letter are based on the OU 1 impact alone.

A separate set of contaminants of concern (COCs) will be developed for the OU-wide risk assessment and the source area risk assessment. The non-source area risk assessment may also need a separate set of COCs.

The schedule that OU 2 is currently working toward is based on the extension request of delivery of the Draft Phase II RFI/RI Report to the regulatory agencies on December 16, 1993. This schedule was based on performing one OU-wide risk assessment. Increasing the risk assessment requirements at this point will increase the cost and schedule for completion of the Draft Phase II RFI/RI Report. The options for the OU 2 risk assessment are discussed below.

### OPTION 1: ONE OU-WIDE RISK ASSESSMENT

#### Assumptions

One risk assessment will be performed based on the assumption that the source area as stipulated in the Interagency Agreement (IAG) is the OU. Chemicals of concern and exposure

DIST.	LTR	ENC
BENEDETTI, R.L.	✓	
BENJAMIN, A.		
BERMAN, H.S.		
BRANCH, D.B.		
CARNIVAL, G.J.		
COPP, R.D.		
DAVIS, J.G.		
FERRERA, D.W.		
HANNI, B.J.		
HARMAN, L.K.		
HEALY, T.J.		
HEDAHL, T.		
HILBIG, J.G.		
KIRBY, W.A.		
KUESTER, A.W.		
LEE, E.M.		
MANN, H.P.	X	
MARX, G.E.		
MCDONALD, M.M.		
MCKENNA, F.G.		
MONTROSE, J.K.		
MORGAN, R.V.		
POTTER, G.L.		
PIZZUTO, V.M.		
RILEY, J.H.		
SANDLIN, N.B.		
SHEPLER, R.L.		
STEWART, D.L.		
SULLIVAN, M.T.		
SWANSON, E.R.		
WILKINSON, R.B.	X	
WILLIAMS, S. (ORC)		
WILSON, J.M.		
ZANE, J.O.		
BUSBY, W.S.	X	X
LAKE, D.Y.O.		

Primrose, A ✓  
Bille, P. ✓  
Roberts, R. ✓  
Smith, D. ✓

Brooks, M.C. X  
OU 2 FILE X  
CORRES CONTROL X X  
ADMIN RECORD X X  
TRAFFIC  
RM Tracking X

CLASSIFICATION

ICNI		
UNCLASSIFIED	X	X
CONFIDENTIAL		
SECRET		

AUTHORIZED CLASSIFIER SIGNATURE  
DOCUMENT CLASSIFICATION REVIEW WAIVER PER  
DATE CLASSIFICATION OFFICE

REPLY TO RFP CC NO:  
N/A

OPTION ITEM STATUS  
 OPEN  CLOSED  
 PARTIAL

APPROVALS:  
WSB - [Signature]  
RIG & TYPIST INITIALS  
ALP dqi

ADMIN RECORD

A-OU2-000626

REVIEWED FOR CLASSIFICATION/ICNI
BY G. T. Cordick 520
DATE 7-1-93

point concentrations will be based on evaluation of all OU 2 data. Separate evaluation of a *limited number of anomalies* will be included. Not all anomalies will be evaluated.

#### Consequences

While this option does not necessitate an increase in schedule or cost, there is a significant chance that the regulatory agencies may reject this approach during review of the Draft Phase II RFI/RI Report. The agencies expect that decisions made for OU 1 will be applied to the subsequent OUs.

Rejection of the Draft Phase II RFI/RI Report might require negotiations and/or dispute resolution. A schedule extension request was granted for OU 1 in order to negotiate an agreement. However, OU 2 might not get a schedule extension if negotiations are necessary, based on the regulatory agencies' belief that OU 1 negotiations would apply to OU 2. This could cause an increase in penalties.

#### Benefits

This option will allow the fastest completion of the Draft Phase II RFI/RI Report, and therefore, will minimize fines and penalties. This option meets our interpretation of the requirements of the IAG as the source area is defined as the OU. Therefore, this option is the least costly option that will meet IAG and work plan objectives.

#### Cost and Schedule Impact

No impacts are anticipated.

### **OPTION 2: OU-WIDE, SOURCE AREA, AND ANOMALY RISK ASSESSMENTS**

#### Assumptions

An OU-wide risk assessment will be performed along with separate evaluation of a limited number of anomalies. Two source areas will be considered for the source area risk assessment. Separate COC lists will be developed for the OU-wide risk assessment and each of the two source area risk assessments. No additional modeling would be done for the two source area risk assessments.

#### Consequences

The regulatory agencies may reject this approach during review of the Draft Phase II RFI/RI Report as they might expect that decisions made for OU 1 will be applied to the subsequent OUs. Specifically, this option does not include a non-source area risk assessment, and the limited number of source area risk assessments may not be acceptable. The rejection of the Draft Phase II RFI/RI Report could require negotiations and/or dispute resolution to resolve. A schedule extension request was granted for OU 1 in order to negotiate an agreement. However, OU 2 might not get a schedule extension if negotiations are necessary, causing a potential increase in penalties.

#### Benefits

This is a compromise option. While it will increase cost and schedule, these will not be increased as much as with the four risk assessments. This option will more than satisfy the requirements of the IAG.

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#### Cost and Schedule Impact

This option could double the cost of the risk assessment and add up to five months to the schedule. Selection of the limited number of source areas would be an iterative process taking into account spatial, temporal and chemical-specific factors. It would be necessary to develop source area maps after all data has been received. These source areas may need to be reviewed/approved by the Department of Energy (DOE)/EPA/CDH prior to further assessment which may add significantly to the cost depending on when responses are received from EPA/CDH. Agency review may minimize the chance of rejection of the Draft and Final Reports.

### **OPTION 3: OU-WIDE, SOURCE AREA, ANOMALY RISK ASSESSMENTS AND A NON-SOURCE AREA RISK ASSESSMENT**

#### Assumptions

These assessments match the negotiations between OU 1 and the Agencies. Two to five source areas may be considered for the source area risk assessment. Each source area will require a separate COC list. In addition, the non-source area risk assessment will also require a separate COC list. Numerous (up to 10) anomalous areas will be examined. The non-source area risk assessment will be conducted on a OU-wide basis after all sources and anomalies have been removed. No additional modeling will be conducted for the source areas.

#### Consequences

This option has the largest cost and schedule increase. An extension request may or may not be granted to accomplish this task. If there is no schedule extension, additional fines and penalties may accrue. In addition, significant additional funding will be necessary from change control to accomplish these risk assessments.

In addition, if OU 1 and OU 2 both do four risk assessments, the remaining OUs also may be forced to do the same. This would be a major programmatic cost impact.

#### Benefits

This option far exceeds the requirements of the IAG. The Agencies have already agreed to this approach for OU 1 and therefore should accept the Draft Phase II RFI/RI Report. However, there is no approved example to follow so the risk of an unacceptable report is still present. Numerous meetings with the Agencies would be required to minimize this risk. There would be potential additional delays while negotiating decisions as per the OU 1 discussions.

#### Cost and Schedule Impact

This option could triple the cost of the risk assessment and add up to 9 months of schedule. Selection of the source areas is an iterative process taking into account spatial, temporal and chemical-specific factors. It will be necessary to develop source area maps after all data has been received. These source areas may need to be reviewed/approved by DOE/EPA/CDH prior to further assessment which may add significantly to the cost depending on when responses are received from EPA/CDH. The number of source area risk assessments will be limited to control costs.

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## RECOMMENDATION

Of these options, EG&G recommends Option 1 since this is the most cost effective and time effective method which meets the IAG and work plan requirements. Although Option 3 was jointly agreed to by EG&G, DOE and the Agencies, Option 1 meets the IAG requirements as currently interpreted. Option 1 also meets the work plan requirements and schedule and funding constraints. If this recommendation is acceptable, we recommend presenting it to the Agencies for discussion and agreement. However, this presentation may result in dispute resolution.

Please indicate whether Option 1 is acceptable by June 30, 1993. OU 2 will continue working towards the goal of one risk assessment (Option 1) unless instructed to do otherwise.

If you have any questions or comments concerning this letter, please contact A. L. Primrose at extension 8618.



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