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# EG&G ROCKY FLATS

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EG&G ROCKY FLATS, INC.  
ROCKY FLATS PLANT, P.O. BOX 464, GOLDEN, COLORADO 80402-0464 • (303) 966-7000

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DIST.	LTR	ENC
BARAL, M.E.		
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VIS, J.G.		
RRERA, D.W.		
AY, R.E.		
IS, J.A.		
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LAN, P.M.		
NNI, B.J.		
RMAN, L.K.		
ALY, T.J.		
DAHL, T.	X	X
BIG, J.G.		
TCHINS, N.M.		
CKSON, D.T.		
LL, R.E.		
ESTER, A.W.		
RX, G.E.		
DONALD, M.M.		
KENNA, F.G.		
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ORGAN, R.V.		
ITTER, G.L.		
ZUTO, V.M.		
SING, T.L.		
NDLIN, N.B.		
HWARTZ, J.K.		
TLOCK, G.H.		
EWART, D.L.		
IGER, S.G.	X	X
BIN, P.M.		
ORHEIS, G.M.		
SON, J.M.		
A. Lee	X	X
Krause	X	X
Hopkins	X	X
Spain	X	X
Wood	X	X

September 30, 1994

Jessie M. Roberson  
Acting Manager for  
Environmental Restoration  
DOE, RFFO

Shirley J. Olinger  
Acting Assistant Manager for  
Environment, Safety and Health  
DOE, RFFO

Attn: A. Marquez

PROPOSED STRATEGY FOR INTEGRATION OF NATURAL RESOURCE DAMAGE ASSESSMENT  
ACTIVITIES - GHS-173-94

Refs:

- (a) J. M. Roberson and S. J. Olinger ltr (02387) to S. G. Stiger and G. H. Setlock, Evaluation of Natural Resources Injury During Remedial Investigation and Feasibility Study of Operable Units at the Rocky Flats Plant, March 22, 1994.
- (b) S. G. Stiger and T. G. Hedahl ltr, TGH-222-94, to J. M. Roberson and S. J. Olinger, Evaluation of Natural Resource Injury and Liability during Remedial Investigation and Feasibility Studies of Operable Units at the Rocky Flats Plant, May 12, 1994.

Enclosed is EG&G's proposed strategy for integrating Natural Resource Damage Assessment activities with CERCLA/RCRA/CHWA activities under the Interagency Agreement as was requested in Reference a and agreed to in Reference b, above.

Input from DOE, RFFO and support contractor personnel is the next step required to resolve several issues; one of which is trustee coordination. EG&G proposes to schedule a meeting in a few weeks with key RFFO personnel to start resolving issues and refining the enclosed strategy. Economic issues support is available from Scientific Applications International Corporation (SAIC) through a contract modification of the existing Economic Analysis Methodology Contract.

Mitigation, protection and restoration of natural resources as a result of all Rocky Flats projects, operations and activities may be best addressed by developing Best Management Practices or similar protective measures to minimize injury to natural resources and restore or otherwise mitigate where possible. It is probably not

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REPLY TO RFP CC NO:

ITEM STATUS  
PARTIAL/OPEN  
CLOSED  
APPROVALS:

EG & TYPIST INITIALS  
FL SES

ADMIN RECCRD

SW-A-003616

11/8

J. M. Roberson  
S. J. Olinger  
September 30, 1994  
94-RF-10092  
Page 2

..appropriate to attempt to include all Rocky Flats' projects, as requested in your  
correspondence, in the strategy to integrate natural resource concerns with CERCLA.

Schedule, cost and scope impacts are dependent upon the final strategy and upon the level and timing of trustee involvement, which apparently cannot be determined until the memorandum of understanding with the trustees is signed and discussions begin. Every effort will be made to fit NRDA integration into existing schedules.

Issues such as the uncertain status of non-use values, trustee coordination, and the difficulty of breaking down natural resource damages to an operable unit (ou) level, may dictate unanticipated changes in strategy and implementation.

Please contact Pam Lee at extension 3917 or J. Krause at extension 3633 with any questions and to schedule a convenient meeting date for RFFO personnel to initiate dialogue concerning the proposed strategy.

*SMMests for G.H. Setlock*

G. H. Setlock, Program Manager  
Environmental Protection Management  
EG&G Rocky Flats, Inc.

ses

Orig. and 1 cc - J. M. Roberson-S. J. Olinger

Enclosure:  
As Stated

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## DRAFT NRDA-CERCLA/RCRA/CHWA INTEGRATION STRATEGY FOR RFETS

### Introduction

Under section 107(a) and 120 (a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended, the Department of Energy (DOE) is liable for damages resulting from injury to, destruction of, or loss of natural resources at the Rocky Flats Environmental Technology Site (RFETS). Natural Resource Trustees are responsible for acting on behalf of the public to protect natural resources and obtain compensation for those resources if they are injured as a result of a release of hazardous substances. Trustees can use a Natural Resource Damage Assessment (NRDA) to obtain compensation for residual injuries not addressed by remedial actions. Trustees at RFETS include the Secretary of Energy [hereafter referred to as DOE] as the lead Natural Resource Trustee, the Secretary of the Interior [hereafter referred to as the U.S. Department of the Interior (DOI)], the executive director of the Colorado Department of Natural Resources (CDNR), the executive director of the Colorado Department of Public Health and Environment (CDPHE), and the Attorney General of the State of Colorado (AG). Natural resources that are protected under CERCLA can include land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources. This is a draft strategy for integrating Natural Resource Damage Assessment (NRDA) concerns into the CERCLA/Resource Conservation and Recovery Act (RCRA)/ Colorado Hazardous Waste Act (CHWA) process at RFETS.

### Purpose

The purpose of this strategy is to provide a method of integrating natural resource concerns into the overall planning and implementation of remedial activities under the Interagency Agreement (IAG), to protect and restore natural resources. By including natural resource concerns in the planning process, and including natural resources during selection of remedial or corrective actions, it may be possible to reduce the residual damages to natural resources that remain after the remedial or corrective actions have been completed. This could reduce the total cost of environmental cleanup, including both implementation costs and natural resource damages. Cooperation with trustees, combined with responsible resource management, may allow DOE, RFFO to avoid costly litigation and obtain a release from natural resource liability, i.e., a "Covenant Not To Sue" from the trustees.

### Scope

This strategy covers RFETS activities that are regulated by the CERCLA/RCRA/CHWA process. Some activities that have the potential to impact natural resources at RFETS do not fall under the CERCLA/RCRA/CHWA process. These activities are not addressed in this strategy.

## Results

The draft strategy for integrating NRDA concerns into the CERCLA/RCRA/CHWA process at RFETS is illustrated by the two flowcharts on the following pages. One flowchart applies to final remedial actions, and the other applies to interim measures/interim remedial actions (IM/IRAs).

## Discussion

The draft strategy outlined on the accompanying flowcharts identifies steps to eventually provide DOE, RFFO with the information necessary to both protect natural resources during the CERCLA/RCRA/CHWA process, and to minimize natural resource liability, while still complying with cleanup requirements. Additional discussion is required to improve and revise the strategy, and resolve certain issues.

A Data Quality Objectives (DQO) Process will be used at the beginning of the strategy to help ensure that the type, quantity, and quality of data used in the strategy steps are appropriate for the intended application.

Other DOE facilities have made some efforts toward addressing natural resource concerns at their facilities, and while their efforts are not completed, a review of their efforts may provide useful information and help avoid duplication of effort in finalizing and implementing a similar strategy for RFETS. Insights pertaining to problems such as how to deal with estimates of natural resource damages at the OU level, which is not normally done for natural resource damages, may be gained by looking at other efforts.

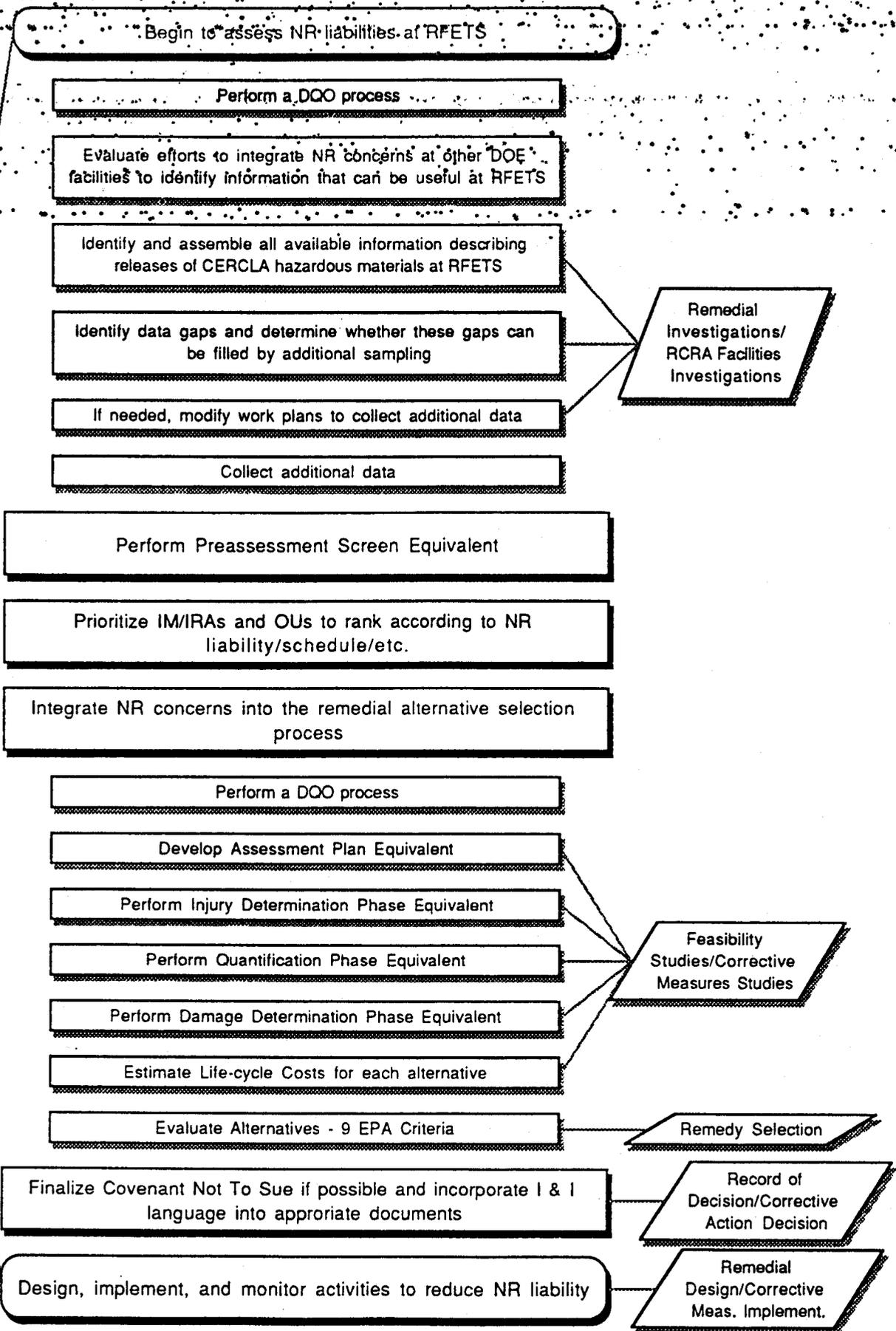
Remedial Investigations (RIs) and RCRA Facility Investigations (RFIs), and other available documents will be reviewed to obtain information describing releases of CERCLA hazardous materials at RFETS. Legal analysis of these releases, discussed in more detail below, will help determine whether releases are statutorily excluded from natural resource liability. Releases that are not statutorily excluded from liability will be analyzed, according to the final strategy, to determine whether they have caused injury to natural resources, and whether they fulfill the regulatory criteria to justify performing a NRDA.

Data gaps will be identified, and additional data may be gathered if practicable, to fill those gaps.

The equivalent of a Preassessment Screen (PAS) will probably be performed in order to determine whether releases are likely to justify a full NRDA. In some cases, the CERCLA Ecological Assessment (EPA's official name is Environmental Evaluation (EE)) may serve as a partial or complete substitute for the PAS. The decision of whether to perform a PAS equivalent, or use an existing EE, and whether they must be done for individual Operable Units (OUs) or groups of OUs, or on a watershed or sitewide basis, must still be resolved as part of the final strategy development.

# DRAFT NRDA-CERCLA/RCRA/CHWA INTEGRATION STRATEGY FOR RFETS

LEGAL ANALYSES  
TRUSTEE COORDINATION



# DRAFT NRDA-CERCLA/RCRA/CHWA INTEGRATION STRATEGY FOR RFETS INTERIM MEASURES/INTERIM REMEDIAL ACTIONS

LEGAL ANALYSES  
TRUSTEE COORDINATION

Begin to assess NR liabilities at RFETS

Perform a DQO process

Evaluate efforts to integrate NR concerns at other DOE facilities to identify information that can be useful at RFETS

Identify and assemble all available information describing releases of CERCLA hazardous materials at RFETS

Identify data gaps and determine whether these gaps can be filled by additional sampling

If needed, modify work plans to collect additional data

Collect additional data

Remedial Investigations/  
RCRA Facilities Investigations

Perform Preassessment Screen Equivalent

Prioritize IM/IRAs and OUs to rank according to NR liability/schedule/etc.

Integrate NR concerns into the remedial alternative selection process

Perform a DQO process

Develop Assessment Plan Equivalent

Perform Injury Determination Phase Equivalent

Perform Quantification Phase Equivalent

Perform Damage Determination Phase Equivalent

Estimate Life-cycle Costs for each alternative

Evaluate Alternatives

Interim Remedial Action Plan/Interim Measures Plan

Finalize Covenant Not To Sue if possible and incorporate I & I language into appropriate documents

IM/IRA Final Decision Document

Design, implement, and monitor activities to reduce NR liability

Prioritization of OUs and IM/IRAs will be attempted, in order to identify which OUs or IM/IRAs should be addressed first or which should be given a higher priority. Proposed schedules for completion, and potential natural resource liability will be among the criteria used to prioritize.

In order to arrive at estimates of potential damages, it may be necessary to go through a process similar to the Type B Assessment found at 43 CFR Part 11, or another process agreed to by the trustees, to arrive at an estimate of natural resource damages that can be assigned to individual OUs and evaluated as part of the remedial selection process. Since trustees are not required to follow the regulations found at 43 CFR Part 11, and frequently do not follow them, this part of the strategy may change in the final version, and may change according to the positions taken by the trustees. Legal guidance may also be needed to determine how to handle situations that may arise if trustees positions differ widely from each other or from DOE's position regarding the methods that should be used to arrive at damage estimates.

One of the main goals of the strategy is to be able to develop reasonably accurate life-cycle costs for remedial alternatives, so that the total cost of the alternative to the public can be evaluated. Further details of how this can best be accomplished must be discussed during finalization of this strategy. There will likely be a number of possible remedial alternatives for each OU, and complete analysis of those alternatives from a natural resource damage perspective may require evaluating each alternative with a number of restoration scenarios in addition to the alternative without restoration. It is also not certain whether it will be possible to meaningfully break down natural resource damage estimates to the OU level, since natural resource damages are more geared toward measurement at watershed, site-wide, or similar levels. Comparisons at the OU level may prove to be very difficult.

## Legal Analyses

Legal issues that must be resolved as part of the integration process will help determine the extent of legal liability, and how to minimize liability resulting from remedial activities. Legal guidance will also be important during coordination with trustees and in ensuring that documentation and decisions are defensible in any future legal actions. Legal issues that have been identified include:

- Determine which releases are excluded from Natural Resource liability, and how to deal with releases whose liability is uncertain.
- Determine where and how irreversible and irretrievable language needs to be included in the CERCLA/RCRA/ NEPA documentation to minimize Natural Resource liability.
- Provide guidance to ensure documentation is properly done and is defensible in any future legal actions.
- Provide guidance to ensure decisions are made after considering legal standards of proof as well as scientific standards.

- Provide guidance if trustee coordination breaks down or if trustees do not want to follow Department of Interior regulations.

### **Trustee Coordination**

Coordination and cooperation with trustees will be a primary goal throughout the process. Further guidance from DOE, RFFO will be necessary to finalize trustee coordination activities. Some trustee issues will likely be resolved during discussions with trustees. These discussions may only occur after the Memorandum of Understanding that is currently being negotiated is finalized and signed. Trustee issues that require further resolution include:

- Timing and mechanism to include trustees in Natural Resource concerns.
- Should trustee involvement be separated into technical and management levels as it had been in the past in order to expedite review and speed up the process?
- How should Ecological Risk Assessments and Natural Resource concerns be coordinated.

### **Currently Existing Injuries and Damages**

Currently existing injuries and damages resulting from completed activities such as the 881 Hillside French Drain Project can be estimated once the strategy is finalized and trustee involvement commences. Since the only natural resource damages that carry liability under CERCLA are the residual damages that remain after remediation is completed, an estimate of currently existing damages due to releases of CERCLA hazardous substance would have limited application.

### **Mitigation, Protection, and Restoration of Natural Resources as a Result of All Rocky Flats Projects**

Mitigation, protection and restoration of natural resources as a result of all Rocky Flats projects, operations and activities may best be addressed by developing Best Management Practices or similar protective measures to minimize injury to natural resources and restore or otherwise mitigate where possible. It is not appropriate to include all Rocky Flats projects in the strategy to integrate natural resource concerns with CERCLA, since some activities that have the potential to injure natural resources do not go through the CERCLA process, and would not be addressed in this strategy. Minimizing injury to natural resources would also minimize damages resulting from that injury, and restoration carried out in a manner that does not increase ecological or human health risk would reduce residual injury. Actions to offset potential and residual natural resource injuries and damages would be more efficiently designed and implemented after those injuries and damages are identified, which can not be accurately done without trustee input.

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