

# RECORDS WE NEED IN THE RECORD OF DECISION

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# RECORD OF DECISION – CONTENT REFERENCES

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## **The National Contingency Plan (NCP)**

- 40 CFR 300.430 Remedial Investigation/Feasibility Study and Selection of Remedy

## **EPA 540-R-98-031 (1999)**

- A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents

## **DERP Manual DoDM 4715.20 (2012)**

- DoD Manual covers similar level of detail for ROD as NCP
- Defines Decision Document (DD) and Record of Decision (ROD)
  - DD: generic term documenting selection of removal action, remedial action or other environmental action.
  - ROD: DD that documents remedial action plan under CERCLA



## **Formerly Used Defense Sites (FUDS) Handbook (2022)**

- FUDS Program Implementing Guidance, supplement to ER 200-3-1
- Appendix C – Development and Approval of Decision Documents
- Worksheet C-1 Outline for Records of Decision



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# FUDS HANDBOOK, WORKSHEET C-1

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## PART 1: DECLARATION

- Site Name and Location
- Statement and Basis of Purpose
- Assessment of Project
- Description of Selected Remedy
- Statutory Determinations
- Data Certification Checklist
- Authorizing Signature

## PART 2: DECISION SUMMARY

- Project Name, Location, and Brief Description
- Project History and Enforcement Activities
- Community Participation
- Scope and Role of Response Action
- Project Characteristics
- Current and Potential Future Land and Water Uses
- Summary of Project Risks
- Remedial Action Objectives
- Description of Alternatives
- Comparative Analysis of Alternatives
- Principal Threat Issues
- Selected Remedy
- Statutory Determinations
- Documentation of Significant Changes from Preferred Alternative of PP

## PART 3: RESPONSIVENESS SUMMARY

- Stakeholder Issues and Lead Agency Responses
- Technical and Legal Issues

(2) Current and potential future surface and subsurface routes of human or environmental exposure.

(3) Likelihood for migration of contaminants of concern from current location or to other media.

(4) Human and ecological populations that could be affected.

g. For projects with groundwater DERP eligible CERCLA contamination for execution by the FUDS Program, describe the following:

(1) Aquifer(s) affected or threatened by site contamination, types of geologic materials, approximate depths, whether aquifer is confined or unconfined.

(2) Groundwater flow directions within each aquifer and between aquifers and groundwater discharge locations (e.g., surface waters, wetlands, other aquifers).

(3) Interconnection between surface contamination (e.g., soils, sediments/surface water) and groundwater contamination.

(4) Confirmed or suspected presence and location of non-aqueous phase liquids.

(5) If groundwater models were used to define the fate and transport, identify the model used and major model assumptions.

h. Note other site-specific factors that may affect response actions.

**6. CURRENT AND POTENTIAL FUTURE LAND AND WATER USES.**

a. Land Uses.

(1) Current on-site land uses.

(2) Current adjacent/surrounding land uses.

(3) Reasonably Anticipated Future Land Uses and Basis for Future Use Assumptions (e.g., zoning maps, nearby development, 20-year development plans, dialogue with local land use planning officials and citizens, reuse assessment).

(4) Existing physical, legal, or administrative constraints or restrictions on land use (e.g. restrictive deed covenants, zoning limitations, regulatory controls, or physical conditions that prevent certain uses).

b. Groundwater and Surface Water Uses. (For MMRP without MC, this section does not need to be expanded upon.)

(1) Current groundwater and surface water uses.

(2) Beneficial groundwater and surface water uses (e.g. potential drinking water, irrigation) and basis for future use assumptions (e.g., Comprehensive State Groundwater Protection Plan, promulgated State classification guidelines).

(3) If beneficial use is potential drinking water source, identify the approximate time frame of reasonably anticipated future drinking water use (e.g., groundwater aquifer not currently used as a drinking water source but expected to be utilized in 30 to 50 years).

(4) Location of reasonably anticipated use in relation to location and anticipated migration of DERP eligible CERCLA contamination for execution by the FUDS Program.

c. For a no-action decision, this section establishes the foundation for the site risks section, which provides the primary basis for the no action decision. Current and potential future land and ground-water resource uses should be clearly explained and documented. Site use characteristics shape the formation of realistic exposure scenarios for the baseline risk assessment.

**7. SUMMARY OF PROJECT RISKS.**

a. Human Health Risks.

(1) Identify the concentrations of contaminants of concern in each medium.

(2) Summarize the results of the exposure assessment.

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# FUDS HANDBOOK, WORKSHEET C-1

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## PART 1: DECLARATION

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**THIS is the “Executive Summary”**

## PART 2: DECISION SUMMARY

- Project Name, Location, and Brief Description
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- Scope and Role of Response Action
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## PART 3: RESPONSIVENESS SUMMARY

- Stakeholder Issues and Lead Agency Responses
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### Worksheet C-1

#### Outline for Records of Decision.

#### GENERAL REQUIREMENTS

Each ROD shall include:

- (1). A title page.
- (2). A table of contents.
- (3). Page numbers on each page indicating page number and total number of pages in the document, e.g., “1 of 25”.
- (4). Header in the upper right-hand corner of each page including document type (i.e., “Record of Decision” or “Decision Document”) FUDS Property and Project names (e.g., “Camp Grant Rifle Range, Range Investigation”); project location (e.g., “New Milford, IL”); and the 11-digit FUDS Project Number (e.g., “E05IL000801”).

#### PART 1: THE DECLARATION

The Declaration functions as the abstract and formal authorizing signature page for the ROD.

##### 1. PROJECT NAME AND LOCATION

2. STATEMENT OF BASIS AND PURPOSE. Stipulate the factual and legal basis for the Selected Remedy.

3. ASSESSMENT OF PROJECT. Stipulate there is a threat to public health, welfare, or the environment. (This section is not required for a no-action decision.)

##### 4. DESCRIPTION OF SELECTED REMEDY.

- a. Describe the major components of the Selected Remedy in a bullet fashion.
- b. Describe the scope of the remedy.
- c. Describe how this remedial action addresses principal threats, if any, and other DERP eligible CERCLA contamination for execution by the FUDS Program (i.e., what is being treated, what is being contained, and what is the rationale for each).
- d. For a no-action decision, none of the CERCLA §121 statutory determinations are necessary in this section since no remedy is being selected. Instead, USACE should state briefly that no remedial action is necessary to ensure protection of human health and the environment.

5. STATUTORY DETERMINATIONS. Describe how the Selected Remedy satisfies the statutory requirements of CERCLA §121 and discuss the applicability of the FYR requirements.

6. DATA CERTIFICATION CHECKLIST. The Declaration should stipulate that the following information is included in the ROD (or provide a brief explanation for why this information is not included): (This section is not required for a no-action decision.)

- a. Contaminants of concern and their respective concentrations.
- b. Baseline risk assessment.
- c. Cleanup levels established and the basis for these levels.
- d. How contaminants of concern will be addressed.
- e. Current and reasonably anticipated future land use assumptions and current and potential future beneficial uses of groundwater used in the baseline risk assessment and ROD.
- f. Potential land and groundwater restrictions that will be recommended as a result of the Selected Remedy.
- g. Estimated capital, annual operation and maintenance (O&M), and total CTC estimate recorded in FUDSMIS (RA-C and RA-O only) and the number of years over which the remedy cost estimates are projected.





# FUDS HANDBOOK, WORKSHEET C-1



## “Remediation Goals” vs. “Clean-up Levels”

- RAO/RGs → Alternative → Clean-up Levels
- Clean-up levels are the **remedy’s** end point
  - The ROD documents how implementation of the remedy achieves the RAOs.
  - Achieving the implementation of a well-defined Selected Remedy means we have achieved the RAOs
- Clean-up levels must be measurable/clear enough to know when we achieve RC.
- RMM is a risk assessment tool for the RI; not a remediation end point
  - RAOs can use terms like unacceptable risk
  - DON’T use it for clean-up levels

(3) Summarize the results of the toxicity assessment.

(4) Summarize the risk characterization for both current and potential future land use scenarios and identify major assumptions and sources of uncertainty.

b. Ecological Risks.

(1) Identify the concentrations of contaminants of concern in each medium.

(2) Summarize the results of the exposure assessment.

(3) Summarize the results of the ecological effects assessment.

(4) Summarize the results of the ecological risk characterization and identify major assumptions and sources of uncertainty.

c. Risk from DERP eligible CERCLA contamination for execution by the FUDS Program relative to background (non-DoD) contamination.

d. Basis for Response Action. Clearly present the basis for taking the response action at the conclusion of this section.

## 8. REMEDIAL ACTION OBJECTIVES.

- a. Present a clear statement of the specific RAOs for the project (e.g., treatment of contaminated soils above health-based action levels, restoration of groundwater plume to drinking water levels, and containment of DNAPL source areas) and reference a list or table of the individual performance standards. For MMRP, present a clear statement of the specific RAOs for the MRA/MRS (e.g., detection and removal of MEC to a specified depth related to current and reasonably anticipated future land use, LUC to restrict or preclude access to certain areas in the MRS, or information to modify people's behavior in the actions they perform within the MRS).
- b. Discuss the basis and rationale for RAOs (e.g., current and reasonably anticipated future land use and potential beneficial groundwater use).
- c. Explain how the RAOs address risks identified in the risk assessment (e.g., how will the risks driving the need for action be addressed by the response action?).
- d. Discuss the approach that will be used to confidently demonstrate the cleanup levels/Remedial Goals have been met. Establish an exit strategy for achieving completion of the remedy.

(3) Land use controls (and entity responsible for implementing and maintaining them).

(4) Operations and maintenance (O&M) activities required to maintain the integrity of the remedy (e.g., cap maintenance).

(5) Monitoring requirements.

b. Common Elements and Distinguishing Features of Each Alternative. Describe common elements and distinguishing features unique to each response option. Examples of these elements include:





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# TYPICAL RECORD OF DECISION ISSUES



## Selected remedy issues

- Cleanup criteria vague, unattainable, or missing(!)
- No explanation of how we judge RC
- Vague or non-existent LUCs descriptions
- Doesn't explain ARAR compliance
- Doesn't comply with
  - DoD policy for maximizing DGM
  - FUDS policy for using AGC

## Remedial footprint issues

- Not clearly defined
- Doesn't address coverage beneath roads and buildings
  - That means we're treating the whole footprint!
- Doesn't account for sensitive habitats





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# ARE WE THERE YET? - SURFACE AND SUBSURFACE MEC REMOVAL

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How will we know if we have achieved the Remedy?

- Details of the remedy should include
  - **Specific** cleanup criteria to be achieved
    - e.g., MEC would be removed to a depth of 18 inches (or to the limits of detection for smaller MEC items)...
    - Include a table of expected detection depths.
  - **Specify** where the remedy will be implemented
    - e.g., ..throughout the HUA and LUA (with the exception of areas with obstructions such as buildings, roads, or large trees).
  - **Specify** the Limitations.
    - e.g., MEC will remain in-place below detection depth at the site and could still potentially be encountered; however, LUCs will be used to manage this remaining risk.



*Need to understand what is required to implement the remedy and how we will tell when we have achieved RC*





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# ARE WE THERE YET? - SURFACE AND SUBSURFACE MEC REMOVAL

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How does our CSM impact implementation of the Remedy?

- Sensitive Habitat/Protected Species
- Archeological/Cultural Resources
- Wetlands
- Land Use
- Vegetation
- Slope
- Roads
- Buildings
- Infrastructure

What is the footprint of each Remedy Element?

We must list the exclusion areas!





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# ARE WE THERE YET? - LAND USE CONTROLS

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How will we know if we have achieved the Remedy?

- Details of the remedy should
  - **Specify** the elements of the LUCs
    - The ROD isn't intended to be a LUCIP but should lay some ground rules on expectations. Pamphlets (distributed how?), meetings (how often?), signs (where?), or training (for whom?). To what audience?
  - **Specify** the target audience of LUCs
    - Is it only landowners, site worker, the public? What is the target population/footprint of the LUCs?
  - **Specify** who will implement the LUCs? O&M?



*Need to understand what is required to implement the remedy and how we will tell when we have achieved RC*



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# ARE WE THERE YET? – MUNITIONS CONSTITUENTS

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How will we know if we have achieved the Remedy?

–Details of the remedy should

- **Specify** the target CoCs
  - Which chemicals are driving the removal.
- **Specify** the clean-up levels.
  - i.e., contaminant-specific cleanup levels
- **Specify** how we will know we have it all.
  - What type of sampling is required to confirm removal is complete?



*Need to understand what is required to implement the remedy and how we will tell when we have achieved RC*





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# CAN WE DO IT?

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Break down all the elements and **think** about implementability?

- Can we do AGC in all areas of the site?
  - If not, can we do DGM instead? or Analog? (Specify the **exception areas**.)
- Can we perform MEC removal next to utilities/Infrastructure?
  - Which utilities? where are they? (Specify the **exception areas**.)
- Are other groups (other than the lead agency) implementing LUCs?
  - Have we documented their willingness?
- Can we evacuate the area for Demo?
  - Are there alternatives? Have we included the cost?
- Do the alternatives comply with Policy?
  - DoD policy for maximizing DGM
  - FUDS policy for using AGC
  - Can we comply with the ARARs?
  - Is Analog Removal necessary at your site? (Get it in the ROD.)
- Is a site visit needed?



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# DO WE NEED DO IT? SHOULD WE EXCLUDE IT?

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Are all elements of the Alternative necessary?

– We often list Surface and Subsurface MEC Removal

- But do we need a surface removal or is a sweep more appropriate?

Are there alternative methods that should be included to avoid exception area?

– Could a different DGM instrument be used?

– If we must use analog get it in the ROD for the flag signature.





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# IF AT FIRST YOU DON'T SUCCEED...

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If we need to revise the selected remedy:

- There is a ROD section for that  
“Documentation of Significant changes  
from Preferred Alternative of PP”
- Some changes require a revised PP  
(Talk with OC).



*It's better to get it right than to have to repeat  
work later and deal with ESDs, ROD  
amendments, or REAs*



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ANY  
QUESTIONS?







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# QUESTIONS?

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