

MEETING MINUTES FOR  
DOE/NRC PUBLIC MEETING ON HANFORD DEFENSE WASTE DRAFT EIS

Date/Location of Meeting:

September 3, 1987; NRC Willste Bldg., Silver Spring, Maryland

Attendees/Organizational Affiliation:

Attached

Purpose:

DOE briefed NRC staff on how they plan to handle NRC comments on the draft EIS.

Observations:

The questions and discussions in this meeting focused on NRC comments on the Hanford Defense Waste Draft EIS and DOE's response to those comments. No new issues/concerns relative to the Hanford defense wastes were raised in this meeting.

Vugraphs:

Attached

Agreements:

None

Open Items:

None

Signature/Date:

DOE representative

*Serald H. Daly*

NRC representative

*RC Browning*

8712030299 870903  
PDR WASTE  
WM-10 PDR

WM Record File

101

WM Project 10

Docket No. \_\_\_\_\_

PDR

LPDR  (B)

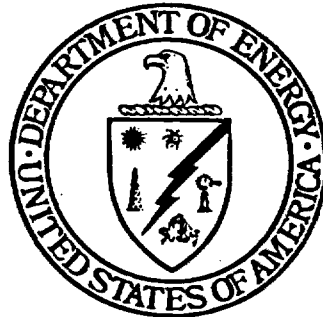
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(Return to WM, 623-SS)

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# List of Attendees

| Attendee             | Organizational Affiliation    | Phone          |
|----------------------|-------------------------------|----------------|
| Chad Glenn           | NRC HLWM                      | FTS 427-4439   |
| Kitty Rising         | DOE - Richland                | FTS 444-4718   |
| Steve Stein          | Battell/PNL                   | (206) 525-3130 |
| JOHN J. LARKINS      | NRC - OCM                     | 202-634-1485   |
| RE Browning          | NRC - DHLWM                   | 301-4274069    |
| F.C. Chee            | DOE - DWTM / DP-123           | (301) 353-4215 |
| Jick Wojtasek        | Westinghouse Hanford Co.      | FTS - 448-2085 |
| AUSON FRETE          | WESTINGHOUSE HANFORD          | FTS - 444-7605 |
| Neil Coleman         | NRC / HLTR                    | 427-4131       |
| Mike Bell            | NRC / WMLL                    | FTS 427-4200   |
| DEAN TOUSLEY         | YIN                           | (202) 328-3500 |
| B. J. YOUNG BLOOD    | NRC / DHLWM                   | (301) 427-4177 |
| PAUL J. BEMBIA       | NRC / HLTR                    | 427-4462       |
| TIN MO               | NRC / HLTR                    | FTS 427-4693   |
| Tim JOHNSON          | NRC / WMLL                    | FTS 427-4720   |
| Ted Johnson          | NRC / WMLL                    | FTS 427-4490   |
| Tom Cardone          | NRC / TRB                     | 427-4526       |
| Paul DAVIS           | Sandia labs                   | FTS 846-5421   |
| CHARLENE HARLAN      | SANDIA LABS.                  | FTS 844-8164   |
| Donald L. Cherry Jr. | NRC / HMS / HLTR              | 427-4094       |
| James R. wolf        | NRC / OGC                     | 492-8694       |
| Phil Altomare        | NRC / HLWM                    | 427 4590       |
| DAN FEHRINGER        | NRC / HLWM                    | 427-4533       |
| REGIS BOYLE          | NRC / WMLL                    | 427-4254       |
| Brag GIARRATANA      | NRC / HLWH                    | 427-4610       |
| Wayne C. Walker      | NRC / HLWM                    | 427-4686       |
| MIKE PHILIPS         | Union of Concerned Scientists | 332-0900       |
| GERALD H. DALY       | DOE / DP-123                  | 353-4187       |



**DRAFT FINAL**

**HANFORD DEFENSE WASTE  
ENVIRONMENTAL IMPACT STATEMENT (HDW-EIS)**

**PRESENTED TO  
NUCLEAR REGULATORY COMMISSION**

**SEPTEMBER 3, 1987**

**SILVER SPRING, MD**

## **AGENDA**

- **BACKGROUND**
- **COMMENT RESPONSE PROCESS**
- **DOE'S PREFERRED ALTERNATIVE**
- **RESPONSES TO SELECTED NRC COMMENTS**

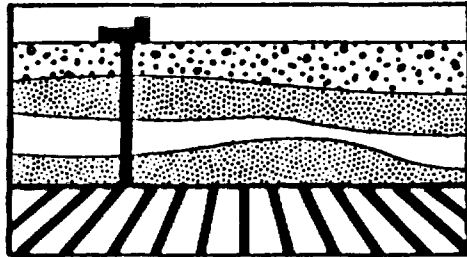
# **PURPOSE OF HANFORD DEFENSE WASTE ENVIRONMENTAL IMPACT STATEMENT**

**TO PROVIDE ENVIRONMENTAL INPUT INTO THE SELECTION AND  
IMPLEMENTATION OF FINAL DISPOSAL ACTIONS FOR HIGH-LEVEL,  
TRANSURANIC AND TANK WASTES CURRENTLY STORED AT THE  
HANFORD SITE**

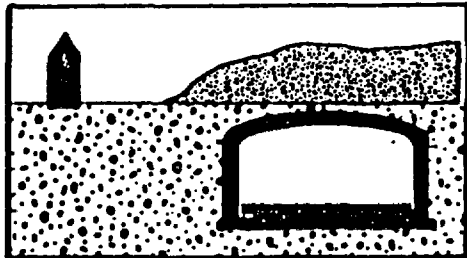
## **WASTE CLASSES**

- **EXISTING TANK WASTE- SINGLE-SHELL TANKS  
DOUBLE-SHELL TANKS**
- **FUTURE TANK WASTE - DOUBLE-SHELL TANKS**
- **TRANSURANIC CONTAMINATED SOIL SITES**
- **PRE-1970 BURIED SUSPECT TRANSURANIC-CONTAMINATED SOLID  
WASTE**
- **RETRIEVABLY STORED AND NEWLY GENERATED TRANSURANIC SOLID  
WASTE**
- **ENCAPSULATED STRONTIUM AND CESIUM**

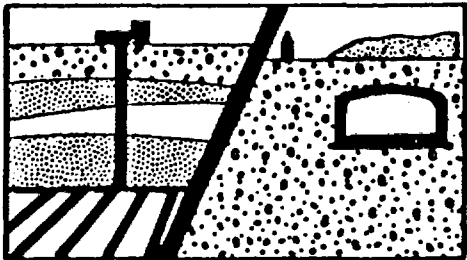
# HANFORD DEFENSE WASTE DISPOSAL ALTERNATIVES



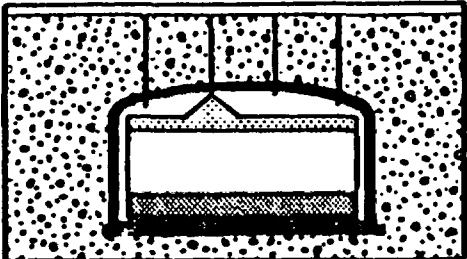
- GEOLOGIC DISPOSAL



- IN-PLACE STABILIZATION AND DISPOSAL



- REFERENCE ALTERNATIVE (COMBINATION)



- NO DISPOSAL ACTION

**HANFORD DEFENSE WASTE-ENVIRONMENTAL  
IMPACT STATEMENT**

**COMMENT RESPONSE PROCESS**



## **COMMENT PROCESS**

- **SEVEN OPEN HOUSES WERE HELD THROUGHOUT PACIFIC NORTHWEST**
- **SEVEN WORKSHOPS WERE CONDUCTED**
- **TO ACCOMMODATE REVIEWERS, 120-DAY COMMENT PERIOD WAS SCHEDULED**
- **HEARINGS WERE HELD IN FOUR LOCATIONS TO RECEIVE COMMENTS**
- **HDW-EIS REFERENCES WERE MADE AVAILABLE IN EIGHT LIBRARIES ACROSS THE COUNTRY**
- **REGULAR COORDINATION MEETINGS HAVE BEEN HELD WITH STATES AND CITIZENS GROUPS**

## **DRAFT HDW-EIS COMMENTS**

- **243 LETTERS**
- **OVER 2,000 COMMENTS AND QUESTIONS**
- **COMMENTS FROM MANY ENTITIES INCLUDING**
  - **ENVIRONMENTAL PROTECTION AGENCY**
  - **NUCLEAR REGULATORY COMMISSION**
  - **DEPARTMENT OF THE INTERIOR AND U.S. GEOLOGICAL SURVEY**
  - **STATES OF WASHINGTON AND OREGON**
  - **CITIZENS FORUM**
  - **AFFECTED INDIAN TRIBES**
  - **INDIVIDUALS**

## **COMMENT RESPONSE PROCESS**

- **ALL WRITTEN COMMENTS WERE CATALOGUED AND ADDRESSED IN VOLUME 4**
- **PUBLIC HEARING TESTIMONIES WERE ALSO INCLUDED IN VOLUME 4**
- **COMMENTS/RESPONSES WERE ORGANIZED IN VOLUME 4 BY**
  - **POLICY ISSUES**
  - **TECHNICAL ISSUES**
  - **ORGANIZATION COMMENTS**
- **COMMENT LETTERS WERE REPRODUCED IN FULL IN VOLUME 5**
- **THE PREFERRED ALTERNATIVE WAS DEVELOPED FROM THE COMMENTS AND DRAFT HDW-EIS ANALYSES**
- **FINAL HDW-EIS CONSISTS OF 5 VOLUMES -- MAIN TEXT (1), APPENDICES (2, 3), COMMENTS/RESPONSES (4), AND REPRODUCED COMMENT LETTERS (5)**

# **VOLUME 4 STRUCTURE**

## **1 INTRODUCTION**

- **PROCESSING OF WRITTEN COMMENTS**
- **PROCESSING OF HEARINGS COMMENTS**
- **FINDING RESPONSES TO COMMENTS**

## **2 POLICY ISSUES**

- **REPOSITORY**
- **DEFENSE WASTE PROGRAM**
- **HDW-EIS SCOPE AND PREPARATION**
- **APPLICABLE LAWS AND REGULATIONS**
- **GENERAL COMMENTS**

## **3 TECHNICAL ISSUES**

- **DATA BASE AND FACILITIES**
- **AFFECTED ENVIRONMENT**
- **DISPOSAL ALTERNATIVES AND TECHNOLOGIES**
- **SHORT-TERM IMPACTS**
- **LONG-TERM IMPACTS**

## **4 ORGANIZATION COMMENTS**

## **5 REFERENCES**

- **INDEX FOR COMMENT LETTERS**
- **INDEX FOR PUBLIC TESTIMONIES**

## **VOLUME 5 STRUCTURE**

- **INTRODUCTION**
- **LIST OF COMMENT LETTERS**
- **REPRODUCTION OF LETTERS**
- **CROSS REFERENCED TO VOLUME 4**

## **PREFERRED ALTERNATIVE**

**COMMENT: NO PREFERRED ALTERNATIVE WAS IDENTIFIED IN THE DRAFT HDW-EIS**

**RESPONSE: THIS OMISSION IN THE DRAFT WAS DELIBERATE SO THAT THE PUBLIC COMMENTS COULD BE COMBINED WITH THE DRAFT HDW-EIS ANALYTICAL RESULTS TO DERIVE A PREFERRED ALTERNATIVE. THE PREFERRED ALTERNATIVE, IN SUMMARY, RECOMMENDS:**

- 1. PROCEED WITH THE DISPOSAL OF THREE WASTE CLASSES**
  - A. DOUBLE-SHELL TANK WASTE**
  - B. ENCAPSULATED CESIUM/STRONTIUM**
  - C. RETRIEVABLY STORED TRU SOLID WASTE**
- 2. DEFER DISPOSAL DECISION ON REMAINING THREE WASTE CLASSES**
  - A. SINGLE-SHELL TANK WASTE**
  - B. TRU-CONTAMINATED SOIL SITES**
  - C. PRE-1970 BURIED SUSPECT TRU-CONTAMINATED SOLID WASTE**
- 3. DECISIONS WILL DEPEND ON THE RESULTS OF COMPREHENSIVE DEVELOPMENT AND EVALUATION ACTIVITIES**

## **PREFERRED ALTERNATIVE (CONT.)**

**A PARTIAL LISTING OF THE DEVELOPMENT AND EVALUATION ACTIVITIES INCLUDE:**

- **PERFORM ADDITIONAL CHARACTERIZATION OF SELECTED SITES' RADIOACTIVE AND HAZARDOUS WASTE COMPONENTS BY SAMPLING AND ANALYSIS**
- **PERFORM ENHANCED ENVIRONMENTAL IMPACT ANALYSIS AS NECESSARY USING IMPROVED PERFORMANCE ASSESSMENT MODELS AND DATA**
- **DEMONSTRATE VOID-SUBSIDENCE CONTROL**
- **DETERMINE THE NEED AND METHODS TO IMPROVE THE ISOLATION AND STABILITY OF THE WASTE FORM, INCLUDING DESTRUCTION/STABILIZATION OF THE HAZARDOUS WASTE COMPONENTS**

## **PREFERRED ALTERNATIVE (CONT.)**

- **EVALUATE ALTERNATIVE METHODS FOR WASTE RETRIEVAL AT SPECIFIC WASTE SITES**
- **EVALUATE ALTERNATIVE METHODS FOR RETRIEVING AND PROCESSING SINGLE-SHELL TANK WASTES**
- **DEVELOP A PROTECTIVE BARRIER THAT WILL MEET THE LONG-TERM ENVIRONMENTAL PROTECTION CRITERIA**

**AT THE CONCLUSION OF THE DEVELOPMENT AND EVALUATION ACTIVITIES, ADDITIONAL ENVIRONMENTAL DOCUMENTATION WILL BE PREPARED FOR PUBLIC REVIEW AS PART OF THE DECISION PROCESS**



**RESPONSES TO  
SELECTED NRC COMMENTS**

**COMMENT: THE FINAL EIS MUST IDENTIFY DECISIONS REQUIRING  
ADDITIONAL R&D**

**RESPONSE: - DOE AGREES AND HAS PRESENTED THIS INFORMATION  
UNDER THE PREFERRED ALTERNATIVE IN THE FINAL HDW-  
EIS**

**COMMENT: ADDITIONAL CHARACTERIZATION OF WASTES IN SINGLE-SHELL TANKS IS NEEDED**

- RESPONSE:**
- FURTHER CHARACTERIZATION OF TANK WASTES IS PLANNED**
  - IDENTIFYING SST WASTES FROM FIRST CYCLE SOLVENT EXTRACTION CANNOT BE DONE, DUE TO EXTENSIVE MIXING IN THE PAST**
  - DOE WILL COMPARE CHARACTERIZATION DATA TO THE APPLICABLE HLW DEFINITION PRIOR TO DISPOSAL DECISIONS**

**COMMENT: FURTHER STUDIES ON BARRIER EFFECTIVENESS ARE ENCOURAGED**

**RESPONSE: - A BARRIER DEVELOPMENT PROGRAM HAS BEEN STARTED WHICH PROVIDES FURTHER DATA AND ANALYSES**

**COMMENT: GEOCHEMICAL DATA FOR THE SITE ARE NEEDED**

**RESPONSE:**

- PROGRAMS ARE UNDERWAY TO CHARACTERIZE THE GEOCHEMICAL AND GEOHYDROLOGICAL ENVIRONMENT AS IT INFLUENCES RADIONUCLIDE AND CHEMICAL RELEASE AND TRANSPORT**
- THESE DATA WILL BE AVAILABLE PRIOR TO IMPLEMENTATION OF DISPOSAL DECISIONS**

**COMMENT:  $K_d$  MODELING IS POTENTIALLY LIMITING**

**RESPONSE:**

- CHEMICAL MOBILITY ASSUMPTIONS ARE CONSERVATIVE**
- MODELS USED ARE DEFINED FOR CURRENT DATA BASE AND WILL BE IMPROVED WITH FURTHER DATA ACQUISITION**

**COMMENT: THE NRC HAS REGULATORY CONCERNS REGARDING LONG-TERM CUMULATIVE EFFECTS AND RCRA**

- RESPONSE:**
- THE CUMULATIVE IMPACTS SECTION, 5.1.4, HAS BEEN EXPANDED IN THE FINAL HDW-EIS, AND NOW ADDRESSES LOW-LEVEL WASTES AT HANFORD**
  - THE FINAL HDW-EIS AFFIRMS APPLICABILITY OF RCRA TO WASTES CONTAINING HAZARDOUS CHEMICALS**

