

# DEMONSTRATION PROJECT

# OBJECTIVES

- BRIEF NUCLEAR REGULATORY
  COMMISSION ON WEST VALLEY
- IDENTIFY AREAS REQUIRING
  DOE-NRC RESOLUTION

# **OVERVIEW**

- LEGISLATIVE STATUS
- COST AND SCHEDULE
- CURRENT AND PLANNED ACTIVITIES
- AREAS FOR DOE NRC RESOLUTION

- PASSED HOUSE & SENATE ON SEPTEMBER 17, 1980
- SIGNED INTO LAW OCTOBER 1, 1980
- AUTHORIZED THE DEPARTMENT "TO CARRY OUT A HIGH—LEVEL LIQUID NUCLEAR WASTE MANAGEMENT DEMONSTRATION PROJECT AT THE WESTERN NEW YORK NUCLEAR SERVICE CENTER IN WEST VALLEY, NEW YORK" (ENACTING CLAUSE)

#### SCOPE

- SOLIDIFY LIQUID HIGH—LEVEL WASTE IN A FORM SUITABLE FOR TRANSPORTATION AND DISPOSAL [SECTION 2(a)(1)]
- DEVELOP CONTAINERS SUITABLE FOR PERMANENT DISPOSAL [SECTION 2(a)(2)]
- TRANSPORT SOLIDIFIED WASTE AS SOON AS FEASIBLE TO FEDERAL REPOSITORY FOR PERMANENT DISPOSAL [SECTION 2(a)(3)]
- DISPOSE OF LOW—LEVEL AND TRANSURANIC WASTES [SECTION 2(a)(4)]
- DECONTAMINATE AND DECOMMISSION TANKS, FACILITIES, MATERIAL AND HARDWARE USED [SECTION 2(a)(5)]

#### **SECTION 2(a)**

(1) THE SECRETARY SHALL SOLIDIFY, IN A FORM SUITABLE FOR TRANS-PORTATION AND DISPOSAL, THE HIGH LEVEL RADIOACTIVE WASTE AT THE CENTER BY VITRIFICATION OR BY SUCH OTHER TECHNOLOGY WHICH THE SECRETARY DETERMINES TO BE THE MOST EFFECTIVE FOR SOLIDIFICATION.

(2) THE SECRETARY SHALL DEVELOP CONTAINERS SUITABLE FOR THE PERMANENT DISPOSAL OF THE HIGH LEVEL RADIOACTIVE WASTE SOLIDIFIED AT THE CENTER.

#### **SECTION 2(a)**

(3) THE SECRETARY SHALL, AS SOON AS FEASIBLE, TRANSPORT, IN ACCORDANCE WITH APPLICABLE PROVISIONS OF LAW, THE WASTE SOLIDIFIED AT THE CENTER TO AN APPROPRIATE FEDERAL REPOSITORY FOR PERMANENT DISPOSAL.

(4) THE SECRETARY SHALL, IN ACCORDANCE WITH APPLICABLE LICEN-SING REQUIREMENTS, DISPOSE OF LOW LEVEL RADIOACTIVE WASTE AND TRANSURANIC WASTE PRODUCED BY THE SOLIDIFICATION OF HIGH LEVEL RADIOACTIVE WASTE UNDER THE PROJECT.

SECTION 2(a)

(5) THE SECRETARY SHALL DECONTAMINATE AND DECOMMISSION-

(A) THE TANKS AND OTHER FACILITIES OF THE CENTER IN WHICH THE HIGH LEVEL RADIOACTIVE WASTE SOLIDIFIED UNDER THE PROJECT WAS STORED.

(B) THE FACILITIES USED IN THE SOLIDIFICATION OF THE WASTE, AND

(C) ANY MATERIAL AND HARDWARE USED IN CONNECTION WITH THE PROJECT, IN ACCORDANCE WITH SUCH REQUIREMENTS AS THE COM-MISSION MAY PRESCRIBE.

# **OVERVIEW**

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#### **PROGRAM MILESTONES**

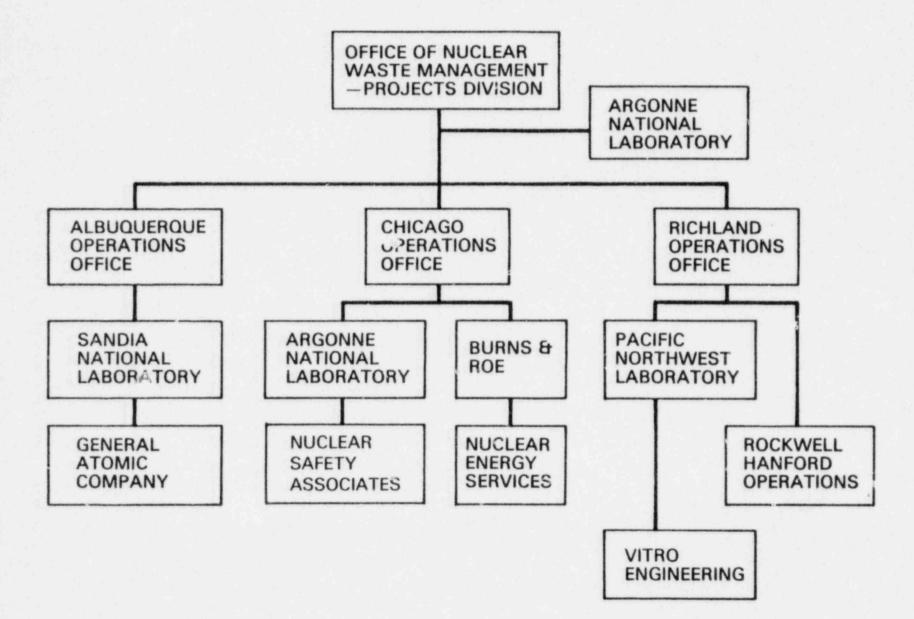
ISSUE DRAFT EIS	4TH QFY 81
HOLD EIS PUBLIC HEARING	4TH QFY 81
ISSUE FINAL EIS	2ND QFY 82
COMPLETE CONCEPTUAL DESIGN	3RD QFY 82
INITIATE PRELIMINARY DESIGN	3RD QFY 82
ISSUE DRAFT WASTE FORM REPORT	4TH QFY 83
INITIATE CONSTRUCTION & LONG LEAD	
PROCUREMENT	4TH QFY 83
PUBLISH WASTE FORM RECORD OF DECISION	2ND QFY 84
COMPLETE CONSTRUCTION	4TH QFY 86
START OPERATION	3RD QFY 87
COMPLETE SOLIDIFICATION	4TH QFY 90
COMPLETE D&D AND FACILITY TURNOVER TO	
NYS	4TH QFY 93

# **COST/SCHEDULE DEVELOPMENT**

- ANL PROGRAM MANAGEMENT OFFICE WILL DEVELOP AND MAINTAIN COST/SCHEDULE BASELINE
- PRECONCEPTUAL DESIGN REPORT, MARCH 1981

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#### **PROGRAM MANAGEMENT SUPPORT**

CONTRACTOR:

ARGONNE NATIONAL LABORATORY

SCOPE:

MANAGEMENT, ANA\_YTICAL AND TECHNICAL SUPPORT TO PROJECTS DIVISION

- PROGRAM PLANNING AND ANALYSIS
- TECHNICAL REPORT REVIEW
- MONTHLY PROJECT PROGRESS REPORT
- PROGRAM SUPPORT

#### **ENVIRONMENTAL IMPACT STATEMENT**

CONTRACTOR:

ARGONNE NATIONAL LABORATORY

SCOPE:

ENVIRONMENTAL ANALYSIS

**KEY DATES:** 

PUBLISHED FEDERAL REGISTER NOTICEDECENHELD PUBLIC SCOPING MEETINGFEBRUISSUE DRAFT EIS4TH QHOLD PUBLIC HEARING4TH QISSUE FINAL EIS2ND Q

DECEMBER 12, 1979 FEBRUARY 2, 1980 4TH QFY 81 4TH QFY 81 2ND QFY 82

#### **PRECONCEPTUAL DESIGN**

CONTRACTOR:

PACIFIC NORTHWEST LABORATORY/VITRO ENGINEERING

SCOPE:

PREPARE DESIGN OF REFERENCE PROCESS SYSTEM

**KEY DATES:** 

INITIATED

**ISSUE DRAFT REPORT** 

**ISSUE FINAL REPORT** 

MARCH 1980 MARCH 1981 SEPTEMBER 1981

#### WASTE CHARACTERIZATION

CONTRACTOR:

ROCKWELL HANFORD OPERATIONS

SCOPE:

SAMPLE AND CHARACTERIZE LIQUID HIGH LEVEL WASTES

KEY DATES: INITIATED CONDUCT SAMPLING

COMPLETE ANALYSIS

**JANUARY 1980** 

MAY 1981

**SEPTEMBER 1981** 

#### WASTE REMOVAL

CONTRACTOR:

**ROCKWELL HANFORD OPERATIONS** 

SCOPE:

WASTE REMOVAL PLAN AND TANK MOCKUP STUDY

**KEY DATES:** 

INITIATED

ISSUED PRELIMINARY REPORT ISSUE DRAFT REMOVAL PLAN

ISSUE DRAFT MOCKUP STUDY

JANUARY 1980 JUNE 1380 DECEMBER 1980 FEBRUARY 1981

#### **INTERIM WASTE FORM DEVELOPMENT**

CONTRACTOR:

ARGONNE NATIONAL LABORATORY

SCOPE:

IMMOBILIZE FOR OFF-SITE TERMINAL PROCESSING AT FUTURE DATE

**KEY DATES:** 

INITIATED	APRIL 1980
ISSUE PRELIMINARY GENERIC WASTE FORM AND PROCESS CRITERIA	N. JEMBER 1980
IS UE ANALYSIS OF POTENTIAL WASTE FORM SYSTEMS	MARCH 1981

#### TRANSPORTATION

CONTRACTOR:

SANDIA NATIONAL LABORATORY GENERAL ATOMIC

SCOPE:

TRANSPORTATION ANALYSIS FOR EIS, LIQUID SAMPLE SHIPMENT, AND SYSTEM DESIGN

**KEY DATES:** 

INITIATED

SUBMITTED NRC APPLICATION

**DECEMBER 1979** 

**SEPTEMBER 1980** 

#### SPECIAL STUDIES

CONTRACTOR:

BURNS & ROE

SCOPE:

DECONTAMINATION & DECOMMISSIONING

SEISMIC REVIEW

LOW LEVEL WASTE MANAGEMENT

FACILITY STUDIES

**KEY DATES:** 

INITIATED

**ISSUED DRAFT REPORTS** 

DECEMBER 1979

**AUGUST 1980** 

## PLANNED ACTIVITIES

- ESTABLISH ON-SITE PROJECT OFFICE
- ISSUE RFPs TO CARRY OUT THE PROJECT
  - INITIAL DECONTAMINATION
  - CONCEPTUAL, PRELIMINARY & FINAL
    - DESIGN
  - FACILITY CONSTRUCTION & OPERATION
  - FINAL DECONTAMINATION & DECOMMIS-SIONING OF TANKS, FACILITIES, MATERIAL & HARDWARE
- ENTER INTO AGREEMENTS WITH STATE OF NEW YORK

#### **PRINCIPLES OF DOE-NYS AGREEMENTS**

- NYS WILL MAKE FACILITIES & HIGH—LEVEL WASTES AVAILABLE TO DOE WITHOUT TITLE TRANSFER [SECTION 2(b)(4)(A)]
- 90/10 DOE-NYS COST SHARING ARRANGEMENT [SECTION 2(b)(4)(C) & 3(b)]
- DOE WILL PROVIDE TECHNICAL ASSISTANCE TO NYS TO AMEND LICENSE [SECTION 2(b)(4)(B)]
- JOINT SUBMITTAL BY DOE & NYS OF AN APPLICATION FOR A LICENSE AMENDMENT [SECTION 2(b)(4)(D)]

**SECTION 2(b)** 

(4) THE SECRETARY SHALL ENTER INTO A COOPERATIVE AGREEMENT WITH THE STATE IN ACCORDANCE WITH THE FEDERAL GRANT AND COOPERATIVE AGREEMENT ACT OF 1977 UNDER WHICH THE STATE WILL CARRY OUT THE FOLLOWING:

(A) THE STATE WILL MAKE AVAILABLE TO THE SECRETARY THE FACILITIES OF THE CENTER AND THE HIGH LEVEL RADIOACTIVE WASTE AT THE CENTER WHICH ARE NECESSARY FOR THE COMPLETION OF THE PROJECT. THE FACILITIES AND THE WASTE SHALL BE MADE AVAILABLE WITHOUT THE TRANSFER OF TITLE AND FOR SUCH PERIOD AS MAY BE REQUIRED FOR COMPLETION OF THE PROJECT.

SECTION 2.(b)(4)

(B) THE SECRETARY SHALL PROVIDE TECHNICAL ASSISTANCE IN SECUR-ING REQUIRED LICENSE AMENDMENTS.

(C) THE STATE SHALL PAY 10 PER CENTUM OF THE COSTS OF THE PROJECT, AS DETERMINED BY THE SECRETARY. IN DETERMINING THE COSTS OF THE PROJECT, THE SECRETARY SHALL CONSIDER THE VALUE OF THE USE OF THE CENTER FOR THE PROJECT. THE STATE MAY NOT USE FEDERAL FUNDS TO PAY ITS SHARE OF THE COST OF THE PROJECT, BUT MAY USE THE PERPETUAL CARE FUND TO PAY SUCH SHARE.

(D) SUBMISSION JOINTLY BY THE DEPARTMENT OF ENERGY AND THE STATE OF NEW YORK OF AN APPLICATION FOR A LICENSING AMEND-MENT AS SOON AS POSSIBLE WITH THE NUCLEAR REGULATORY COM-MISSION PROVIDING FOR THE DEMONSTRATION.

**SECTION 3.** 

(b) THE TOTAL AMOUNT OBLIGATED FOR THE PROJECT BY THE SECRETARY SHALL BE 90 PER CENTUM OF THE COSTS OF THE PROJECT.

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SECTION 2.(c) PROVIDES FOR NUCLEAR REGULATORY COMMISSION REVIEW AND CONSULTATION ROLE. DOE-NRC AGREEMENT SHALL PROVIDE FOR:

- NRC REVIEW OF PLAN FOR WASTE REMOVAL, SOLIDIFICATION, PREPARATION FOR DISPOSAL & DECONTAMINATION [SECTION 2.(c)(1)]
- NRC CONSULTATION ON WASTE FORM & CONTAINERS
  [SECTION 2.(c)(2)]
- NRC REVIEW OF SAFETY ANALYSIS REPORTS, ETC. [SECTION 2.(c)(3)]
- NRC ACCESS TO WEST VALLEY CENTER TO MONITOR DOE ACTIVITIES [SECTION 2.(c)(4)]

#### SECTION 2.(c)

WITHIN ONE YEAR FROM THE DATE OF THE ENACT-MENT OF THIS ACT, THE SECRETARY SHALL ENTER INTO AN AGREEMENT WITH THE COMMISSION TO ESTABLISH ARRANGEMENTS FOR REVIEW AND CONSULTATION BY THE COMMISSION WITH RESPECT TO THE PROJECT. PROVIDED, THAT REVIEW AND CONSULTATION BY THE COMMISSION PURSUANT TO THIS SUBSECTION SHALL BE CONDUCTED INFORMALLY BY THE COMMISSION AND SHALL NOT INCLUDE NOR REQUIRE FORMAL PROCEDURES OR ACTIONS BY THE COMMISSION PURSUANT TO THE ATOMIC ENERGY ACT OF 1954, AS AMENDED, THE ENERGY REORGANIZATION ACT OF 1974, AS AMENDED, OR ANY OTHER LAW. THE AGREEMENT SHALL PROVIDE FOR THE FOLLOWING:

SECTION 2.(c)

(1) THE SECRETARY SHALL SUBMIT TO THE COMMIS-SION FOR ITS REVIEW AND COMMENT, A PLAN FOR THE SOLIDIFICATION OF THE HIGH LEVEL RADIOACTIVE WASTE AT THE CENTER, THE REMOVAL OF THE WASTE FOR PURPOSES OF ITS SOLIDIFICATION, THE PREPARA-TION OF THE WASTE FOR DISPOSAL, AND THE DECON-TAMINATION OF THE FACILITIES TO BE USED IN SOLIDI-FYING THE WASTE.

(2) THE SECRETARY SHALL CONSULT WITH THE COM-MISSION WITH RESPECT TO THE FORM IN WHICH THE HIGH LEVEL RADIOACTIVE WASTE AT THE CENTER SHALL BE SOLIDIFIED AND THE CONTAINERS TO BE US-ED IN THE PERMANENT DISPOSAL OF SUCH WASTE.

Section 2.(c)

(3) THE SECRETARY SHALL SUBMIT TO THE COMMISSION SAFETY ANALYSIS REPORTS AND SUCH OTHER INFORMATION AS THE COMMIS-SION MAY REQUIRE TO IDENTIFY ANY DANGER TO THE PUBLIC HEALTH AND SAFETY WHICH MAY BE PRESENTED BY THE PROJECT.

(4) THE SECRETARY SHALL AFFORD THE COMMISSION ACCESS TO THE CENTER TO ENABLE THE COMMISSION TO MONITOR THE ACTIVITIES UNDER THE PROJECT FOR THE PURPOSE OF ASSURING THE PUBLIC HEALTH AND SAFETY.

# **AREAS REQUIRING RESOLUTION**

- NYS/NFS LICENSE AMENDMENT
- NRC REVIEW & CONSULTATION ROLE
- NRC FINALIZATION OF WASTE FORM CRITERIA
- NRC DECONTAMINATION & DECOMMISSIONING REQUIREMENTS

October 20, 1980 DOE/NRC Meeting on West Valley Demonstration Project Attendee List

Charles Haughney E. G. Zurflueh Kya S. Kim F. R. Cook. Everett Wick Don Nussbaumer J. G. Davis R. E .Cunningham Odell Smith Stuart Treby David McGoff Sheldon Meyers MOrman Klug Wendy Ting Jared J. Davis Malcolm Knapp Sheldon L. Trubatch Regis R. Boyle Don Schweitzer Tom Clark L. C. Rouse Jim Turi Ed Regnier

NRC-FCAF NRC-RES NRC-RES NRC-NMSS NRC-NMSS/WM NRC-NMSS NRC-NMSS NRC-NMSS NRC-SGPL NRC-OELD DOE-ONWM DOE-ONWM DOE-OSO NRC-FCAF NRC-RES NRC-NMSS NRC-OGC NRC-NMSS BNL NRC-NMSS-FCAF NRC-NMSS-FCAF DOE-ONWM NMSS-WM

Enclosure 2