

# Hanford Site

# Waste Management Area C

# INFORMATION SHEET

## Why this information sheet on making closure decisions at Waste Management Area C (WMA-C)?

The Washington State Department of Ecology (Ecology) and the US Department of Energy (USDOE) will soon be making decisions for closure of the first Hanford Site tank farm, designated as Waste Management Area C. Various studies and plans have recently been published by USDOE to begin a dialogue on the WMA-C closure process.

## Where is WMA-C located?

WMA-C is in the 200 East Area of the Hanford Site. It includes 16 underground storage tanks, called Single-Shell Tanks (SSTs), associated ancillary equipment such as vaults, boxes, and piping, and soil contaminated by releases from these structures. An educational guide to closure of the Hanford Site SSTs was developed by Ecology and is titled Tank Closure 101 (Publication Number 08-05-017; rev 07/10). This guide includes information on the responsibilities of the Tri-Party agencies (USDOE, Ecology, and the US Environmental Protection Agency), WMA background, and WMA-Closure options (clean and landfill closure) available under Ecology's rules.

## DID YOU KNOW?

Requirements for public involvement can be found in Section 10. Be informed about upcoming events by reviewing the TPA Public Involvement calendar at:

[http://www.ecy.wa.gov/programs/nwp/PI/pdf/TPA\\_PI\\_Calendar.pdf](http://www.ecy.wa.gov/programs/nwp/PI/pdf/TPA_PI_Calendar.pdf)

## When do we need your input?

USDOE and Ecology plan to provide frequent and objective information to assist in understanding tank closure issues. Our goal is to ensure that all public feedback is captured and considered during the decision-making processes.



Waste Management Area C

## PERFORMANCE ASSESSMENT

## What is the WMA-C PA?

The Waste Management Area Performance Assessment (WMA-C PA) is the modeling tool that Ecology (through the Appendix I process) will use to evaluate the risks from landfill closure (i.e., waste left in place at WMA-C).

The WMA-C PA is already being developed with extensive input from the regulators and stakeholders.

This input is reviewed on a regular basis in a workshop setting that includes representatives of tribal nations, local and regional stakeholder groups, State and Federal regulators, the Nuclear Regulatory Commission, and USDOE Headquarters.

Additionally, briefings on the WMA-C PA development process are provided periodically to a larger audience of stakeholders.

# PROCESSES

## What are the WMA-C closure decision processes?

*Four key regulatory processes will need to be completed to make final WMA-C closure decisions. All four processes will have opportunities for public interaction, review, and comment on proposed decisions, both formally as required by the various regulation and informally as part of our commitment to keeping you informed*

### National Environmental Policy Act (NEPA)

USDOE is in the process of responding to public comments and finalizing the draft Tank Closure and Waste Management Environmental Impact Statement (EIS) which was issued October 2009. The EIS in part analyzes WMA-Closure alternatives, including clean and landfill closure options. After the final EIS is complete, DOE will issue a Record of Decision (ROD). The decisions from the ROD will outline the USDOE recommended path for closure of the WMAs.

### State Environmental Policy Act (SEPA)

Ecology is required to comply with SEPA before taking actions such as issuing a dangerous waste permit modification (Process 3) for closure of single-shell tanks. Adoption of USDOE EIS is an option for compliance with SEPA. Ecology intends to adopt all or part of USDOE NEPA EIS.

### Washington Administrative Code (WAC) 173-303

Washington State has a program for managing hazardous waste that is authorized under the Federal Resource Conservation and Recovery Act (RCRA). The State's RCRA Program rules are contained in Chapter 173-303 WAC. The formal process for making WMA-C final closure decisions is made through these rules. The process begins with USDOE submittal of closure plans, including the WMA Performance Assessment (PA) (see WMA-C PA sidebar on page one), that describe their recommended WMA-C closure actions. The closure actions will need to be found protective of human health and the environment. Ecology will use the WMA-C PA to inform our determination of protectiveness. The WMA-C PA will also be included in the USDOE closure plans. Ecology will make closure decisions based

on these recommendations through draft permit conditions which will be submitted for public review and comment. Final decisions will be made upon issuance of the WMA-C closure permit. The WAC 173-303 process is described in more detail in the Hanford Federal Facility Agreement and Consent Order (HFFACO) Action Plan, Appendix I.

It is expected that this process will occur multiple times through the next few years as more information is gathered to help define WMA-C closure actions. For example, it is expected that the initial closure plan submittals will contain the bulk of information for closure of the SSTs and ancillary equipment. It will define the end state for closure of the WMA-C (in other words, whether WMA-C will be closed as a landfill or not). Later closure plan submittals are expected to include information such as soil corrective measures (HFFACO Milestone M-45-61 due December 31, 2014) and post-closure care, maintenance, and monitoring activities (due no later than

September 30, 2015 in accordance with HFFACO Milestone M-45-82).

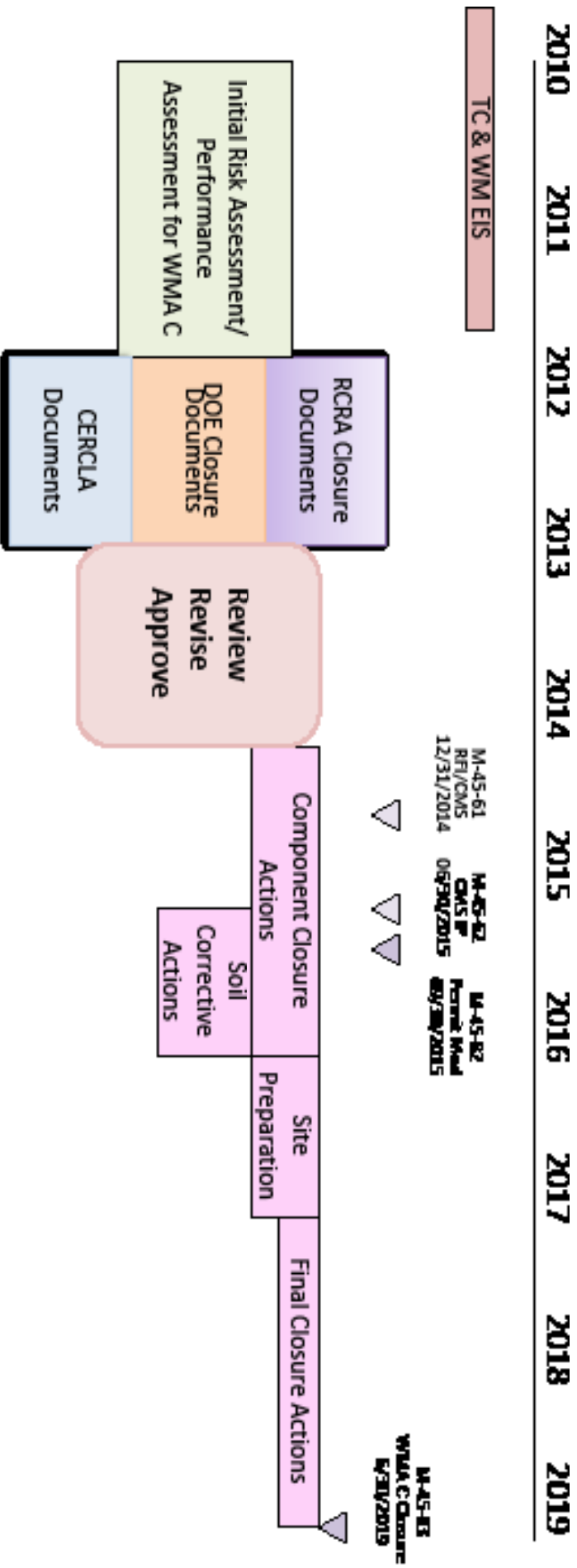
### USDOE Order 435.1

Closure decisions for WMA-C will also need to be made under DOE Order 435.1 which is USDOE's rule for management of any radioactive waste. This order requires a multistep process for closure of WMA-C including classification of the waste and development. USDOE approval of plans that define the approach and activities needed to accomplish closure. The Nuclear Regulatory Commission (NRC) is part of the PA process requirements in 435.1 as well part of the process requirements contained in HFFACO Appendix I. Central to the USDOE and NRC's principles is a commitment to obtain regulator and public review of USDOE's decisions regarding the safe disposal of radioactive waste at WMA-C. Key areas in which USDOE is soliciting regulator and public input are the EIS process and in the development of the WMA-C PA.



# TIMELINE

## Now is the time to discuss closure





# THE 5 DOCUMENTS

## Closure Demonstration Tasks and Documents

### C-301 Catch Tank Waste Retrieval

**RPP-RPT-45723, Rev 0**  
**Catch Tank 241-C-301**  
**Retrieval Feasibility Study**

#### SCOPE

An evaluation of waste removal technologies in the 241-C-301 is provided including estimates of costs and benefits for each.

#### HOW WILL THIS DOCUMENT BE USED?

The retrieval technology for this catch tank will be selected to optimize removal of liquids and solids currently in the tank. The resultant residuals will be evaluated and subsequent closure actions developed. Closure actions will be described in WAC 173-303 closure plans and will be selected by Ecology in the Hanford Site permit after public input.

### USDOE Order 435.1 Waste Determination Process Description Radioactive Waste Determination

**RPP-PLAN-47325, Rev 0**  
**Process Plan for**  
**Waste Management Area C**  
**Tank Waste Residuals**

#### SCOPE

This description will discuss the process that USDOE will use for reaching determinations of the WMA-C residuals after retrieval activities that are subject to DOE Order 435.1.

#### HOW WILL THIS DOCUMENT BE USED?

The process contained in this description document will be used to satisfy the requirements of DOE Order 435.1 which is a precursor to final closure decisions to be made by USDOE.

### Tank Removal Study

**RPP-RPT-47167, Rev 0**  
**41-C Tank Farm –**  
**Tank Removal Study**

#### SCOPE

This study provides an evaluation of demolition and removal of the WMA-C tanks, ancillary equipment, and proximate soils following waste retrieval activities.

#### HOW WILL THIS DOCUMENT BE USED?

After early input from Ecology and the public, this study will provide the main basis in the WAC 173-303 closure plan for evaluating the practicability of removal or decontamination of a tank system required by WAC 173-303-640(8)(b).

### Pipeline Feasibility Evaluation

**RPP-PLAN-47559, Rev 0**  
**Single-Shell Tank Waste**  
**Management Area C Pipeline**  
**Feasibility Evaluation**

#### SCOPE

This evaluation provides existing information about WMA-C pipelines, determines estimates of pipeline inventories, and provides a scoping analysis of risk associated with the inventories. Pipeline characterization

and remediation technologies are also evaluated.

#### HOW WILL THIS DOCUMENT BE USED?

This evaluation makes early recommendations for closure actions associated with WMA-C pipelines under an assumption of landfill closure. Early input from Ecology and the public will refine these recommendations and will form the basis for closure actions presented in the WAC 173-303 closure plans and approved in the Hanford Site permit.

### Integration of RCRA and CERCLA at WMA-C

**RPP-46459, Rev 1**  
**Single-Shell Tank Waste**  
**Management Area C RCRA/CERCLA**  
**Integration White Paper**

#### SCOPE

This white paper describes integration needs between RCRA closure of WMA-C and CERCLA activities that interface with closure and was collaboratively written by the USDOE and Ecology.

#### HOW WILL THIS DOCUMENT BE USED?

This white paper describes integration needs between RCRA closure of WMA-C and CERCLA activities that interface with closure. This white paper was collaboratively written by the OSDEO and Ecology.