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# Technical Communication in Support of Post-Closure Safety: US Examples June 2016

# Communicating Safety of Geological Disposal (1)

## Main Points:

- Each Geological site is unique.
- The critical task is to identify critical exposure pathways, what is known and what is unknown about that pathway (for a site and design).
- Focus science activities on clearly showing safety for each critical pathway.
- In the end, each repository site/design combination will have one or two critical – most likely exposure paths.
- WIPP – Human intrusion due to oil and gas or potash mining exploration.
- YMP – Percolation through the mountain and groundwater transport to the adjacent land.

# Communicating Safety of Geological Disposal (2)

- In general, the US cooperates in international experiments and uses this data as part of describing critical pathways.
- The US Regulations define the process for evaluating future conditions – Features Events and Processes (FEPS), Safety Case Description, Numerical Performance Assessment.
- Numerical models are validated, conservative parameters are used, rigorous peer review and stakeholder review.
- Cut Off time for evaluation is a social decision. This is negotiated with the public by the regulator.
- The Safety Case explanation is the critical technical “story” told by the implementer and the regulator.

# Waste Isolation Pilot Plant (WIPP)

Communication on a repository program must be connected to the **Phase of Effort**, and the **responsibilities** of the communication organization.



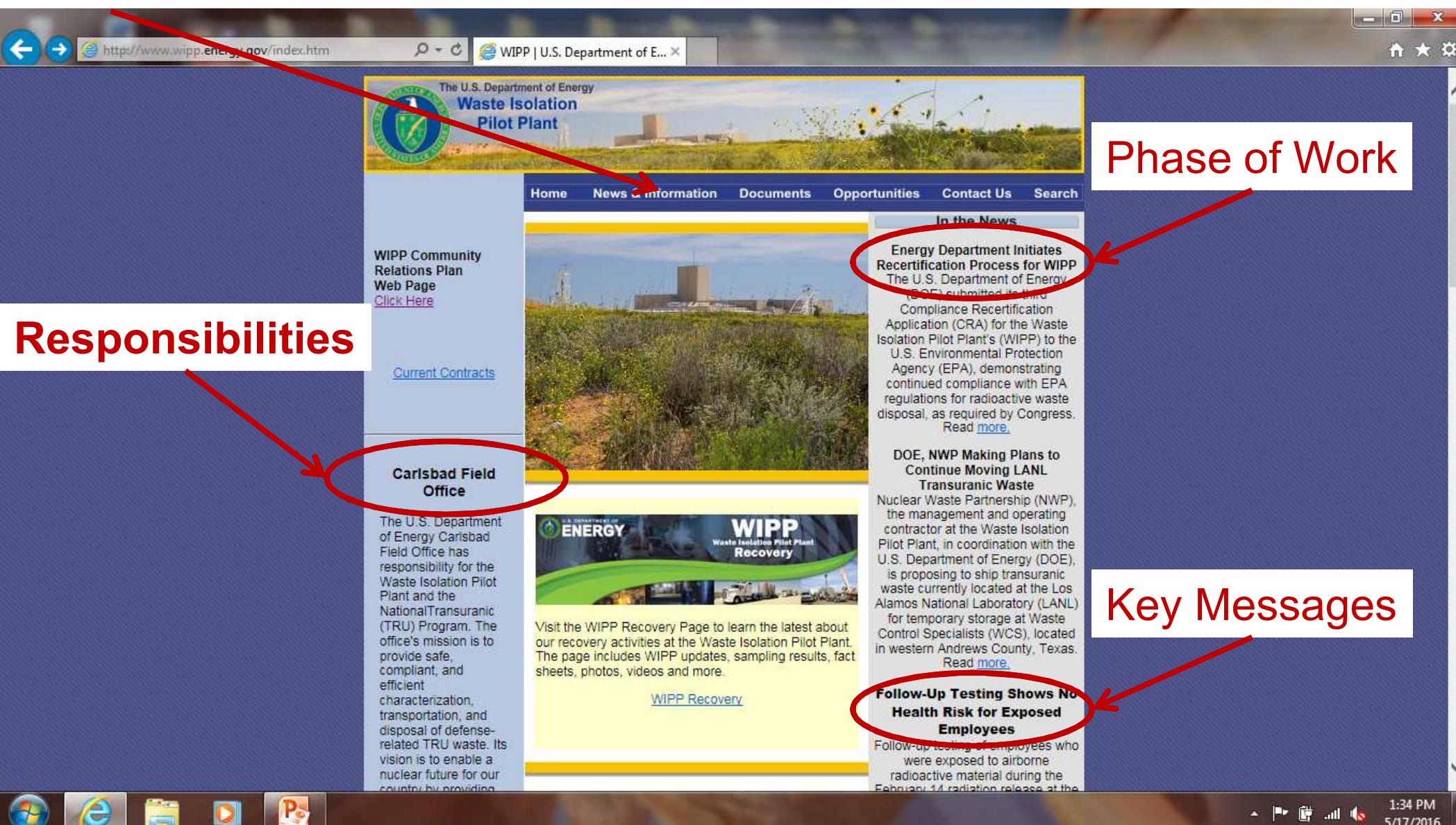
**Pre-license – US Department of Energy (DOE)** had the primary role to communicate

**Post-submittal - the US Environmental Protection Agency (EPA)** had communication responsibility.

# WIPP: DOE (Pre-licensing, Recovery, Recertification)



General Information, News, Technical Documents, Contact Information



The screenshot shows the homepage of the WIPP website (<http://www.wipp.doe.gov/index.htm>). The page features a banner with the WIPP logo and a photo of the facility. A red arrow points from the 'Responsibilities' label to the 'Carlsbad Field Office' section, which is highlighted with a red oval. Another red arrow points from the 'Phase of Work' label to a news article about the recertification process, which is also highlighted with a red oval. A third red arrow points from the 'Key Messages' label to a news article about employee health risk, which is also highlighted with a red oval.

**Responsibilities**

**Carlsbad Field Office**

The U.S. Department of Energy Carlsbad Field Office has responsibility for the Waste Isolation Pilot Plant and the National Transuranic (TRU) Program. The office's mission is to provide safe, compliant, and efficient characterization, transportation, and disposal of defense-related TRU waste. Its vision is to enable a nuclear future for our country by providing

**Phase of Work**

**Energy Department Initiates Recertification Process for WIPP**

The U.S. Department of Energy (DOE) submitted its Third Compliance Recertification Application (CRA) for the Waste Isolation Pilot Plant's (WIPP) to the U.S. Environmental Protection Agency (EPA), demonstrating continued compliance with EPA regulations for radioactive waste disposal, as required by Congress. [Read more](#)

**DOE, NWP Making Plans to Continue Moving LANL Transuranic Waste**

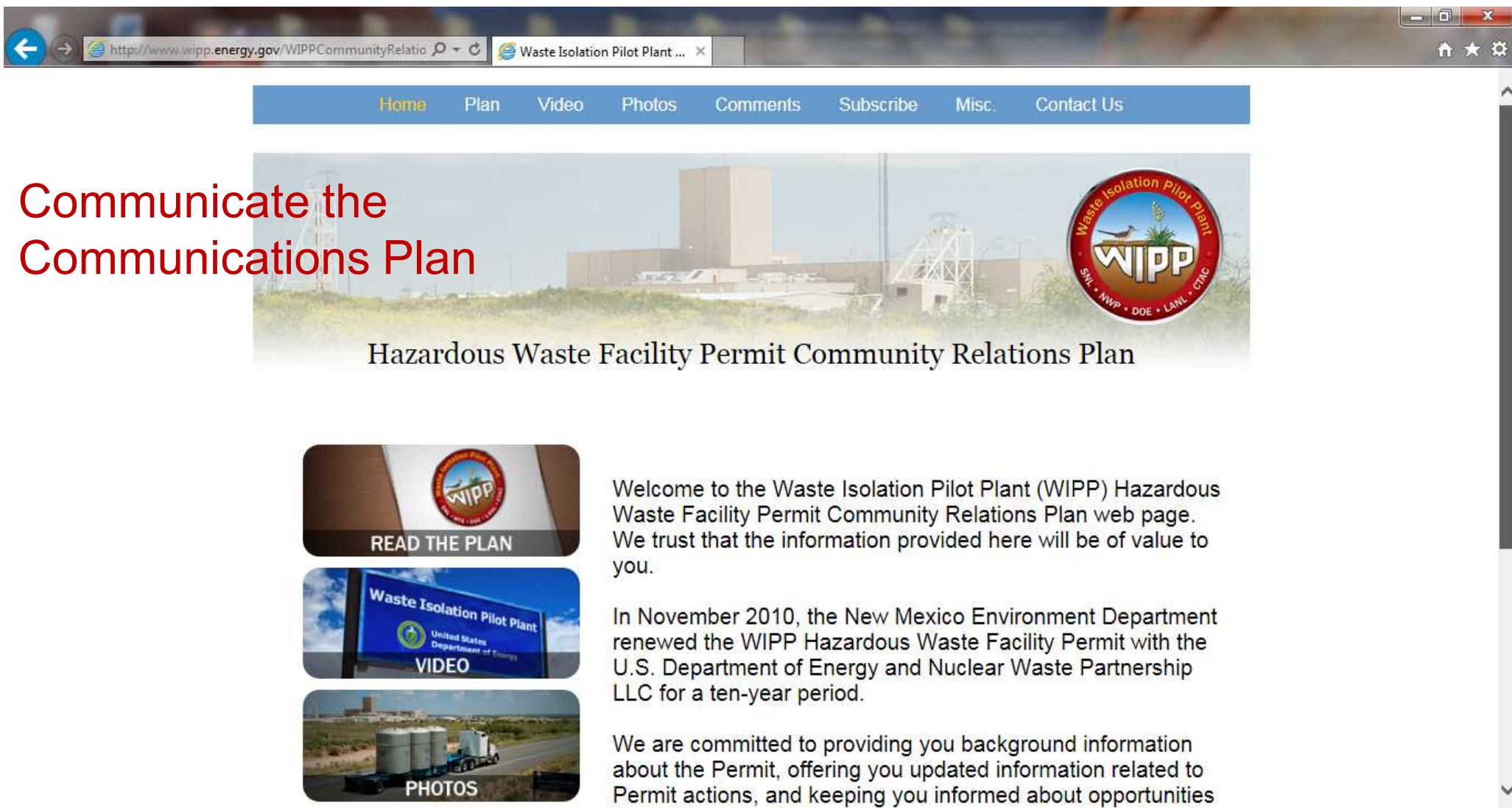
Nuclear Waste Partnership (NWP), the management and operating contractor at the Waste Isolation Pilot Plant, in coordination with the U.S. Department of Energy (DOE), is proposing to ship transuranic waste currently located at the Los Alamos National Laboratory (LANL) for temporary storage at Waste Control Specialists (WCS), located in western Andrews County, Texas. [Read more](#)

**Follow-Up Testing Shows No Health Risk for Exposed Employees**

Follow-up testing of employees who were exposed to airborne radioactive material during the February 14 radiation release at the

**Key Messages**

# WIPP: Community Relations Plan



The screenshot shows a web browser window for the WIPP Community Relations Plan. The address bar shows the URL <http://www.wipp.energy.gov/WIPPCommunityRelations/index.html>. The page features a blue header bar with links for Home, Plan, Video, Photos, Comments, Subscribe, Misc., and Contact Us. Below the header is a large image of the WIPP facility with a circular logo on the right. The main content area has a red title 'Communicate the Communications Plan' and a sub-title 'Hazardous Waste Facility Permit Community Relations Plan'. On the left, there are three buttons: 'READ THE PLAN' (with a circular logo), 'VIDEO' (with a video camera icon), and 'PHOTOS' (with a camera icon). To the right of these buttons is text about the permit renewal and a commitment to providing information.

## Communicate the Communications Plan

### Hazardous Waste Facility Permit Community Relations Plan

 **READ THE PLAN**

 **VIDEO**

 **PHOTOS**

Welcome to the Waste Isolation Pilot Plant (WIPP) Hazardous Waste Facility Permit Community Relations Plan web page. We trust that the information provided here will be of value to you.

In November 2010, the New Mexico Environment Department renewed the WIPP Hazardous Waste Facility Permit with the U.S. Department of Energy and Nuclear Waste Partnership LLC for a ten-year period.

We are committed to providing you background information about the Permit, offering you updated information related to Permit actions, and keeping you informed about opportunities

# WIPP: Experience Exhibit

Facility / Museum 

<http://www.wipp.energy.gov/index.htm>

**Project Participants**

The U.S. Department of Energy Carlsbad Field Office and its contractors team up to carry out the WIPP mission.

For links to some of the major project participants, click [here](#).

**WIPP EXPERIENCE**



Visitors to Carlsbad, N.M. are encouraged to visit the WIPP Experience Exhibit. While public tours of WIPP are not available, the exhibit at our in-town office building features a brief documentary on the project and numerous displays. Friendly staff are available to answer questions about this one-of-a-kind facility.

Free 250-million-year-old rock salt samples are available for all visitors! Groups larger than four people are asked to call in advance for special showings in the auditorium.

**The WIPP Experience Exhibit**  
U.S. Department of Energy  
4021 National Parks Highway  
Carlsbad, New Mexico  
1-800-336-WIPP  
Monday to Thursday  
8:30 a.m. to 3:30 p.m.

**DOE Accident Investigation Board Establishes Hotline**

The DOE Accident Investigation Board (AIB) for the Feb. 5 WIPP underground salt haul truck fire has established a hotline.

If you have a concern or additional information related to this event, please call the hotline number at: 513-744-2191

You may leave just a message with your name and phone number for an AIB member to contact you to discuss your concern and/or related information that you may have or include the details if you prefer.

The DOE AIB thanks you for your interest.

**Stay current on WIPP**

Wanting the latest information about WIPP? Sign up to be notified by e-mail each time TeamWorks, WIPP's online newsletter, is updated.

Click [here](#) to send us an e-mail request.

**Hazardous Waste Permit**

[Information Repository](#)  
[Stakeholder Notification](#)  
[Stakeholder Documents](#)

<http://www.wipp.energy.gov/index.htm>

# WIPP: EPA Communication Approach – Anticipated Licensing



United States  
Environmental Protection  
Agency

Air and Radiation  
(6602J)

EPA 402-K-95-006  
December 1995



## EPA's Communications Plan for the Waste Isolation Pilot Plant



### EPA Roles:

- Issue standards for WIPP
- Develop compliance criteria
- Recertify every 5 years

### Motivation:

“The Agency believes a successful communication and consultation program enhances the regulatory oversight process and ensures sound public policy decisions.”

### Actions:

- Interviews (public press)
- Public meetings
- Timely responses to public questions
- Booklets and fact sheets
- Periodic news letter
- Information Hotline (phone access)

# Yucca Mountain Project (YMP)

- Pre-license – DOE
- License Review – NRC
- Stakeholders (State of Nevada, etc.)



# YMP: DOE (Archived)

http://web.archive.org/web/20080329221001/http://www.ocrwm.doe.gov/ym\_repository/index.shtml

271 captures 2 Jun 06 - 12 May 16

http://www.ocrwm.doe.gov/ym\_repository/index.shtml Go JAN MAR MAY 29 2008 2007 2009

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CIVILIAN RADIOACTIVE WASTE MANAGEMENT

OCRWM - Home Welcome About OCRWM Yucca Mountain Repository :: About the Project :: Designing the Repository :: License Application :: Supplemental Yucca Mountain Repository Environmental Impact Statement :: Protecting People and the Environment :: Weather Conditions Transporting Nuclear Waste Receiving Nuclear Waste Advanced Science Studies Information Library Youth Zone

You are here: Home > undefined > undefined > undefined > undefined > Yucca Mountain Repository > OCRWM - Yucca Mountain Repository

**Yucca Mountain Repository**

Yucca Mountain is the nation's planned repository for spent nuclear fuel.

The U.S. Department of Energy began studying Yucca Mountain, Nevada, in 1978 to determine whether it would be suitable for the nation's first long-term geologic repository for spent nuclear fuel and high-level radioactive waste. Currently stored at 126 sites around the nation, these materials are a result of nuclear power generation and national defense programs.

On July 23, 2002, President Bush signed House Joint Resolution 87, allowing the DOE to take the next step in establishing a safe repository in which to store our nation's nuclear waste. The Department of Energy is currently in the process of preparing an application to obtain the Nuclear Regulatory Commission license to proceed with construction of the repository.

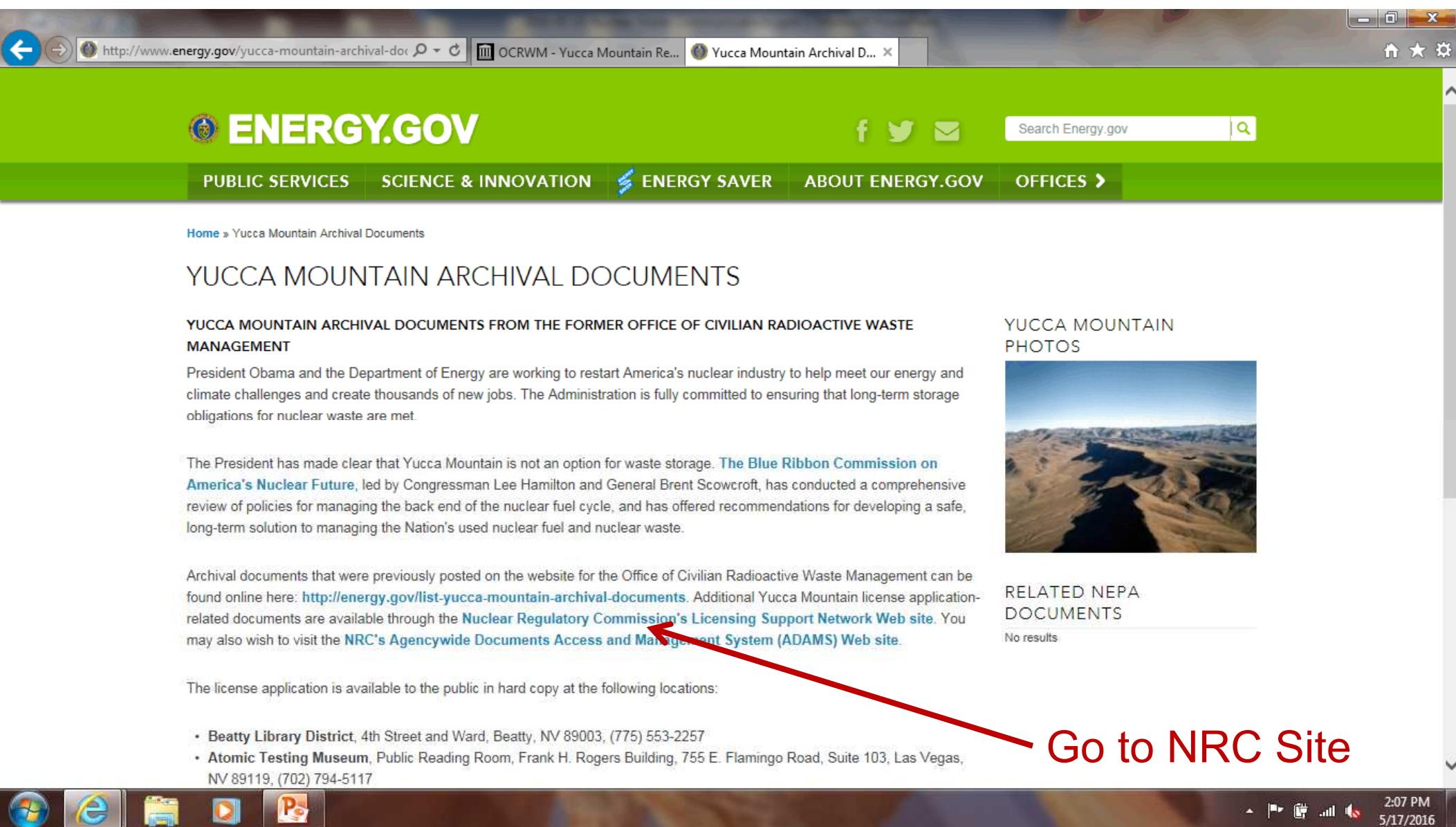
Yucca Mountain is located in a remote desert on federally protected land within the secure boundaries of the Nevada Test Site in Nye

**QUICK FACTS**



2:04 PM 5/17/2016

# YMP: DOE (Current)



http://www.energy.gov/yucca-mountain-archival-docs

OCRWM - Yucca Mountain Re... Yucca Mountain Archival D... X

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Home » Yucca Mountain Archival Documents

### YUCCA MOUNTAIN ARCHIVAL DOCUMENTS

**YUCCA MOUNTAIN ARCHIVAL DOCUMENTS FROM THE FORMER OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT**

President Obama and the Department of Energy are working to restart America's nuclear industry to help meet our energy and climate challenges and create thousands of new jobs. The Administration is fully committed to ensuring that long-term storage obligations for nuclear waste are met.

The President has made clear that Yucca Mountain is not an option for waste storage. [The Blue Ribbon Commission on America's Nuclear Future](#), led by Congressman Lee Hamilton and General Brent Scowcroft, has conducted a comprehensive review of policies for managing the back end of the nuclear fuel cycle, and has offered recommendations for developing a safe, long-term solution to managing the Nation's used nuclear fuel and nuclear waste.

Archival documents that were previously posted on the website for the Office of Civilian Radioactive Waste Management can be found online here: <http://energy.gov/list-yucca-mountain-archival-documents>. Additional Yucca Mountain license application-related documents are available through the [Nuclear Regulatory Commission's Licensing Support Network Web site](#). You may also wish to visit the [NRC's Agencywide Documents Access and Management System \(ADAMS\) Web site](#).

The license application is available to the public in hard copy at the following locations:

- Beatty Library District, 4th Street and Ward, Beatty, NV 89003, (775) 553-2257
- Atomic Testing Museum, Public Reading Room, Frank H. Rogers Building, 755 E. Flamingo Road, Suite 103, Las Vegas, NV 89119, (702) 794-5117

**YUCCA MOUNTAIN PHOTOS**

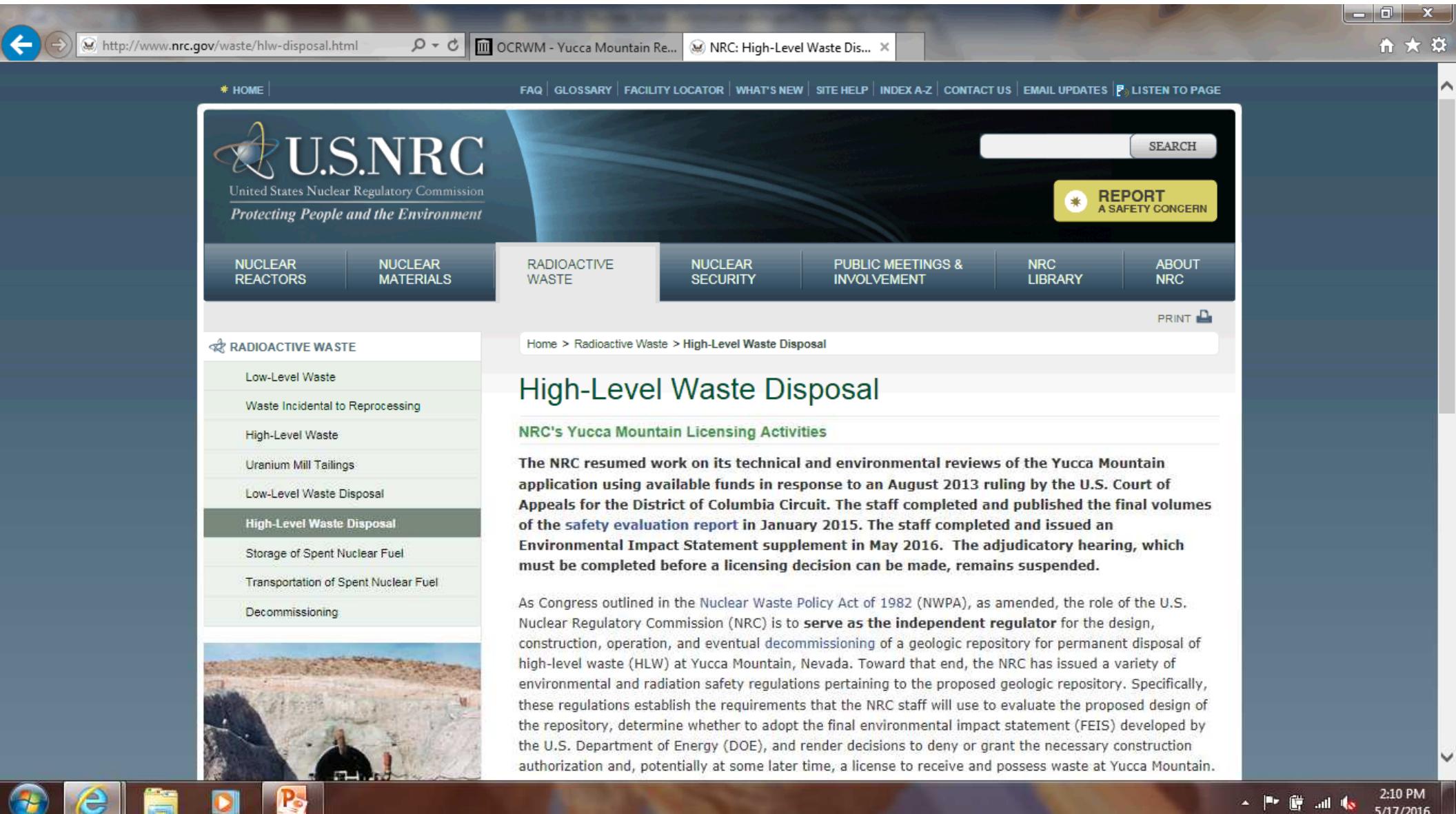


**RELATED NEPA DOCUMENTS**

No results

Go to NRC Site

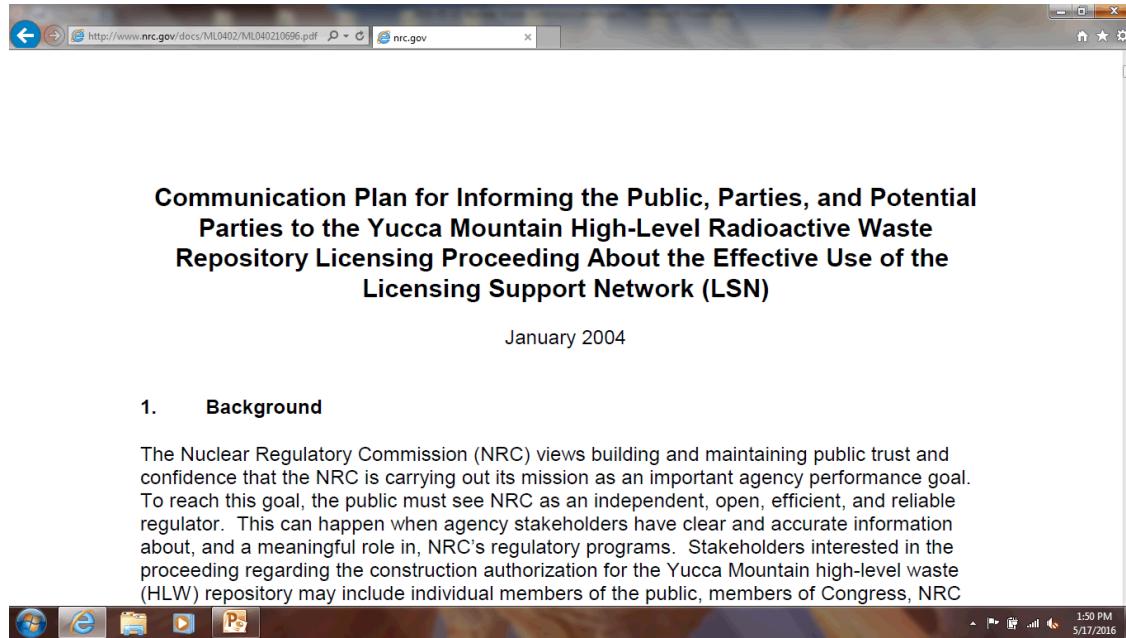
2:07 PM 5/17/2016



The screenshot shows a web browser displaying the NRC website at <http://www.nrc.gov/waste/hlw-disposal.html>. The page is titled "High-Level Waste Disposal" and is part of the "Radioactive Waste" section. The left sidebar lists various waste categories, with "High-Level Waste Disposal" highlighted. The main content area discusses the NRC's licensing activities for Yucca Mountain, mentioning the resumption of work after a 2013 court ruling, the completion of a safety evaluation report in 2015, and the issuance of an environmental impact statement supplement in 2016. The page also notes that an adjudicatory hearing is suspended. The NRC logo and tagline "Protecting People and the Environment" are visible at the top left. The top right features a "SEARCH" bar and a "REPORT A SAFETY CONCERN" button. The bottom of the screen shows the Windows taskbar with icons for Start, Internet Explorer, File Explorer, and others, along with the date and time (2:10 PM, 5/17/2016).

<http://www.nrc.gov/waste/hlw-disposal.html>

# YMP: NRC Communications Plan



Communication Plan for Informing the Public, Parties, and Potential Parties to the Yucca Mountain High-Level Radioactive Waste Repository Licensing Proceeding About the Effective Use of the Licensing Support Network (LSN)

January 2004

1. Background

The Nuclear Regulatory Commission (NRC) views building and maintaining public trust and confidence that the NRC is carrying out its mission as an important agency performance goal. To reach this goal, the public must see NRC as an independent, open, efficient, and reliable regulator. This can happen when agency stakeholders have clear and accurate information about, and a meaningful role in, NRC's regulatory programs. Stakeholders interested in the proceeding regarding the construction authorization for the Yucca Mountain high-level waste (HLW) repository may include individual members of the public, members of Congress, NRC

## Role: Regulator

## Approaches:

- Public Involvement
- Licensing Support Network (LSN) – “electronic access to discovery materials”

## Motivation:

“The Nuclear Regulatory Commission (NRC) views building and maintaining public trust ... as an important agency performance goal. To reach this goal, the public must see NRC as an independent, open, efficient, and reliable regulator. This can happen when agency stakeholders have clear and accurate information about, and a meaningful role in, NRC's regulatory programs.”

# Summary

- Communication of technical support for repository programs must be couched in the “Phase of Effort” and the “responsibilities” of the organization.
- The Implementer has primary responsibility for pre-licensing or in addressing changes
- The Regulator has primary responsibility for licensing and justification of the decision