# Public Hearing

*Draft Supplemental Environmental Impact Statement for Disposition of Depleted Uranium Oxide Conversion Product Generated from DOE's Inventory of Depleted Uranium Hexafluoride (DOE/EIS-0359-S1; DOE/EIS-0360-S1)*

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**Call 301-903-9466 or email DUF6_NEPA@em.doe.gov for troubleshooting.**

Documents can be found at:
https://www.energy.gov/em/disposition-uranium-oxide-conversion-depleted-uranium-hexafluoride

# Note to the Public

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# AGENDA

1. Welcome
2. DOE Presentation
3. Public Comment Sign-Up
4. Public Comment
5. Wrap Up

# DOE Presentation

# Background

- DOE operates depleted uranium hexafluoride ($DUF_6$) conversion facilities at the Portsmouth and Paducah sites to convert the stored $DUF_6$ into depleted uranium (DU) oxide, a more stable form for reuse or disposal.

- DOE has a large quantity (over 760,000 metric tons) of $DUF_6$ stored in cylinders at Portsmouth and Paducah.

- The Portsmouth Site had approximately 21,000 $DUF_6$ cylinders, and the Paducah Site had approximately 46,000 $DUF_6$ cylinders at the start of conversion in 2011.

- Portsmouth $DUF_6$ inventory is expected to be processed in approximately 18 years and Paducah's larger inventory within approximately 30 years.

# Draft Supplemental Environmental Impact Statement for Disposition of Depleted Uranium Oxide Conversion Product Generated from DOE's Inventory of Depleted Uranium Hexafluoride

**2004**
- EISs for Paducah, Kentucky and Portsmouth, Ohio Sites Finalized
- Records of Decision (ROD) published
  - Decision on transportation and disposition of the conversion product deferred

**2007**
- Draft Supplement Analysis released for public comments
  - DOE determined time needed for resolution of regulatory inquiry on analyzing WCS as alternative

**2014**
- Waste Control Specialists LLC (WCS) granted license allowing for disposal of bulk uranium

**2016**
- DOE determined an SEIS was warranted in order to analyze disposal options including WCS
- Notice of Intent (NOI) released announcing preparation of Draft SEIS

**2018**
- DOE issues Draft SEIS
- Public Comment Period 45-days, December 28- 2018 through February 11, 2019

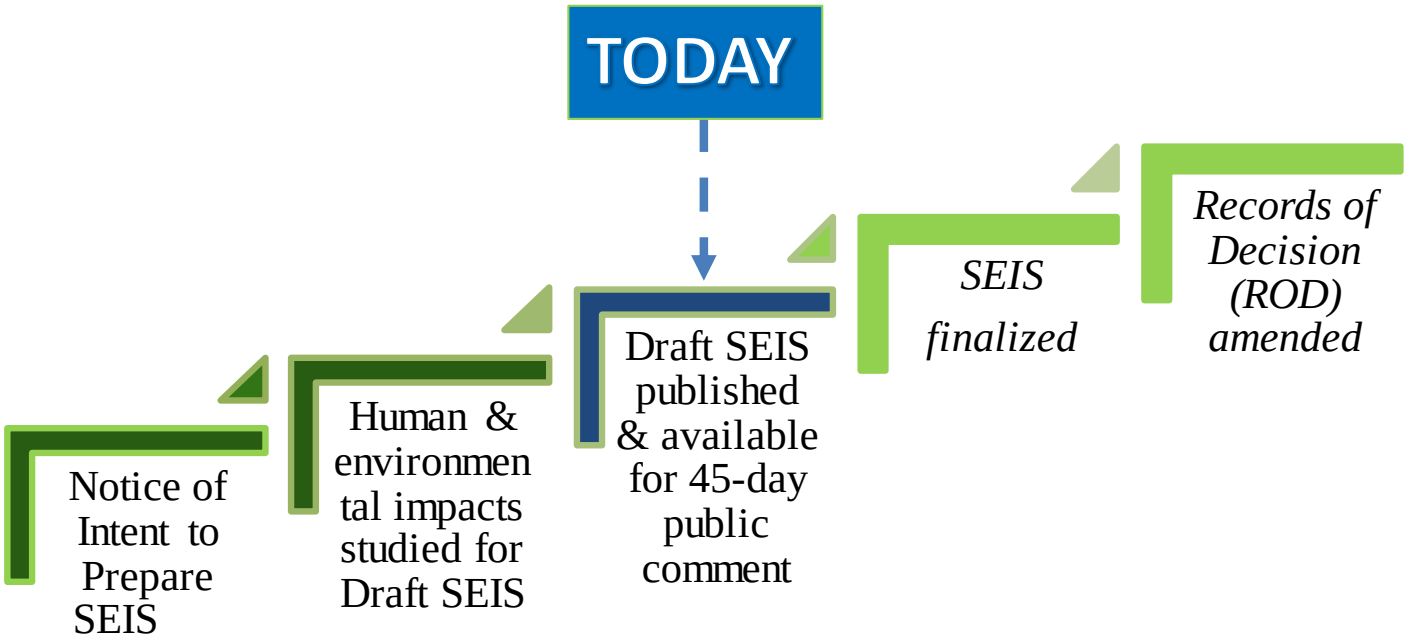
**2019**
- Public Hearings 2019
- Public Comment Period 45-days, December 28- 2018 through February 11, 2019

# Supplemental Environmental Impact Statement

- Prepared in accordance with Council on Environmental Quality Regulations and DOE National Environmental Policy Act implementing procedures
  - Mandates that agencies consider a range of reasonable alternatives
  - Affords an opportunity for the public to provide input to the decision-making process

# The SEIS Process

## Analyzing options, alternatives and potential impacts from proposed activities



# Purpose & Need

To dispose of DU oxide resulting from converting DOE $DUF_6$ inventory to a more stable chemical form and to dispose of other low level radioactive waste (LLW) and mixed LLW (MLLW) (i.e., empty and heel cylinders, calcium fluoride, and ancillary LLW and MLLW) generated during the conversion process.

- If a beneficial use cannot be found for the DU oxide, all or a portion of the inventory may be characterized as waste and need to be dispositioned. This need follows directly from the decisions presented in the RODs for the 2004 EISs that deferred DOE's decision related to the transport and disposition of DU oxide at potential off-site disposal facilities.

# Potential Impacts Considered

- Site Infrastructure
- Climate
- Air Quality
- Noise
- Geology & Soils
- Water Resources
- Biotic Resources
- Public & Occupational Health & Safety
- Socioeconomics
- Waste Management
- Land Use & Aesthetics
- Cultural Resources
- Environmental Justice

# No Action Alternative

- Under No Action Alternative DU oxide would continue to be stored indefinitely at the Paducah and Portsmouth Sites.
- DU oxide would not be disposed of as LLW.
- Empty and heel cylinders, calcium fluoride, and ancillary LLW and MLLW would be shipped to off-site disposal facilities.

# Analyzed Alternatives

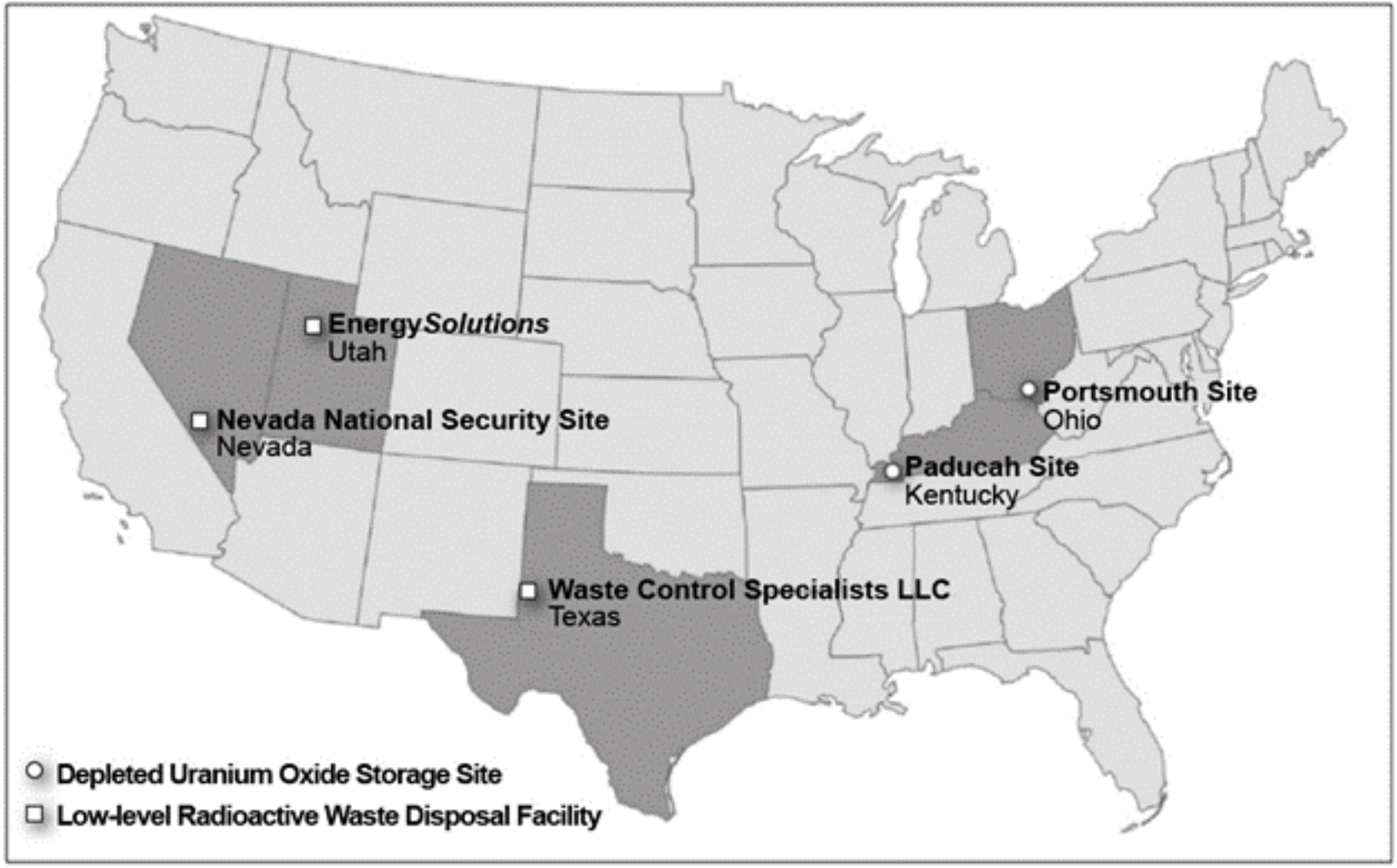
Three disposal location alternatives are proposed:

- DOE-owned LLW disposal facility at Nevada National Security Site, Nye County, Nevada.
  - Rail transportation requires intermodal transfer to truck for last leg of route
  - Both rail and truck methods would be applied

- Energy*Solutions*, LLW disposal facility, Clive, Utah.
  - Transportation options include both rail and truck routes
  - Requires licensing by Utah, which would require a new post closure Stewardship Agreement, similar to WCS.

- Waste Control Specialists LLC LLW disposal facility, Andrews, Texas.
  - Transportation options include both rail and truck routes
  - Currently licensed for DU oxide disposal by Texas

# Locations of Potential Facilities Discussed in the Draft DU Oxide SEIS



# Analyzed Rail and Truck Routes from Paducah to Potential Disposal Sites

# Analyzed Rail and Truck Routes from Portsmouth to Potential Disposal Sites

# Rail Transport Analyzed in Draft SEIS

## Cylinder Disposal

- Approximately 46,150 cylinders of DU oxide generated at Paducah and 22,850 cylinders generated at Portsmouth
- 7,700 railcar shipments from Paducah and 3,800 railcar shipments from Portsmouth
- Conversion process has empty and heel cylinders, $CaF_2$, and ancillary LLW and MLLW that would be disposed of through existing means

## Bulk Bag Disposal

- Approximately 41,061 bulk bags of DU oxide generated at Paducah and 18,142 bulk bags generated at Portsmouth
- 5,130 railcar shipments from Paducah and 2,270 railcar shipments from Portsmouth
- Additionally, 69,000 volume-reduced empty and heel cylinders would also require disposal, therefore, another 2,460 railcar shipments from Paducah and 1,275 rail car shipments from Portsmouth

# Truck Transport Analyzed in Draft SEIS

## Cylinder Disposal

- One full cylinder per truck
- SEIS assumes 1,440 truck shipments each year, with six trucks leaving each day from each site
- Maintaining this rate, 32 years to transport cylinders from Paducah and 15 years from Portsmouth

## Bulk Bag Disposal

- Two bulk bags would be loaded per truck
- 20,510 truck shipments from Paducah and 9,071 truck shipments from Portsmouth
- Additionally, 69,000 volume-reduced empty and heel cylinders would also require disposal, therefore, another 4,970 truck shipments from Paducah and 2,550 truck car shipments from Portsmouth

Bulk Bag

Cylinder

# Cumulative Impacts Considered

- Section 3113(a) of the USEC Privatization Act and Section 66 of the Atomic Energy Act of 1954 (as amended), requires DOE to accept commercial $DUF_6$, that has been determined to be LLW

- An estimated amount of commercial $DUF_6$ was analyzed under Cumulative Impacts for both No Action and Action Alternatives

# Preferred Alternative

- DOE does not have a Preferred Alternative at this time.
- A Preferred Alternative will be included in the Final SEIS.

# Next Steps for the Draft SEIS

- Draft SEIS Comment period will be open until February 11, 2019.
- DOE will consider all comments as it finalizes the SEIS.
- For more information about this draft SEIS: https://www.energy.gov/em/disposition-uranium-oxide-conversion-depleted-uranium-hexafluoride

Mail comments to:
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Email comments to:
DUF6_NEPA@em.doe.gov

# Final SEIS: What to Expect

- The Final SEIS will include responses to comments that were submitted on the Draft SEIS.
- A *Federal Register* Notice will be published that announces the issuance of the Final SEIS (date is TBD).
- Using applicable information, DOE will amend the RODs no sooner than 30 days from the issuance of the Final SEIS.

# Public Comment Sign-up

- We will create our sign up list for participants that wish to provide oral comments.
- Identification of speakers will proceed by category: (1) Federal officials or their representatives, (2) Tribal leaders or their representatives, (3) State officials or their representatives, (4) local officials or their representatives, and (5) all others.
- After the full list is compiled, public comments will begin.

# Comment Period Ground Rules

- When commenting begin by stating your name and organization you are representing (if applicable).
- Please limit your comments to five minutes to ensure that as many people as possible can provide comments.
- Treat all who provide comments with respect.
- Please minimize distractions and mute your phones or microphone when not speaking.
- Thank you for your cooperation and respect.

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# Wrap Up

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- DOE will consider all comments as it finalizes the SEIS.
- For more information on how to provide comments visit: https://www.energy.gov/em/disposition-uranium-oxide-conversion-depleted-uranium-hexafluoride