



EXHUMATION WORKING GROUP UPDATE

Presented By
Lee Gordon, PhD
NYSDERDA

Citizen Task Force
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ACTIVE TASKS



- **Study 1** - ➤ *Task 1.2: Update of Waste Inventories*

- **Study 2** - ➤ *Task 2.2.a: Geophysics Prove-Out Study*
 - *Task 2.4.b: Evaluation of Protective Measures*
 - *Task 2.4.c: Information Review and Development of Soil Investigation Program*

- **Study 3** - ➤ *Task 3.1: Evaluation of Seven Selected Sites*
 - *Task 3.2: Evaluation of Other Pertinent Sites*



Task 1.2: Update of Waste Inventories



Purpose:

- Update waste inventories to account for radiological decay and ingrowth
 - New Base Year of 2020
 - Future Increments: 2050, 2080, 2110, 2140
- Evaluate when removal actions at the SDA, NDA, and WTF could transition from remote to contact-handled actions

Status:

- Final report completed and recently approved by DOE and NYSDERDA
 - Posted to the website

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Task 2.2.a: Geophysics Prove-Out Study



Purpose:

- Test the applicability of five geophysical methods to meet the following full-scale study objectives for the SDA and NDA
 - Identify specific segments within the waste trenches that contain waste monoliths, densely-packed waste materials, or large quantities of metallic waste for comparison against the inventory records.
 - Define the lateral boundaries of trenches and other disposal units
 - Define the bottom of trenches
 - Determine elevation of top of water surface (leachate) in trenches
- Methods include magnetometer survey, electromagnetic (EM) survey, seismic refraction tomography (SRT), multi-channel analysis of surface waves (MASW), and electrical resistivity imaging (ERI)
 - With and without penetrations of the membrane cover

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Task 2.2.a: Geophysics Prove-Out Study (cont.)



Status:

- All field activities complete
- Report in preparation

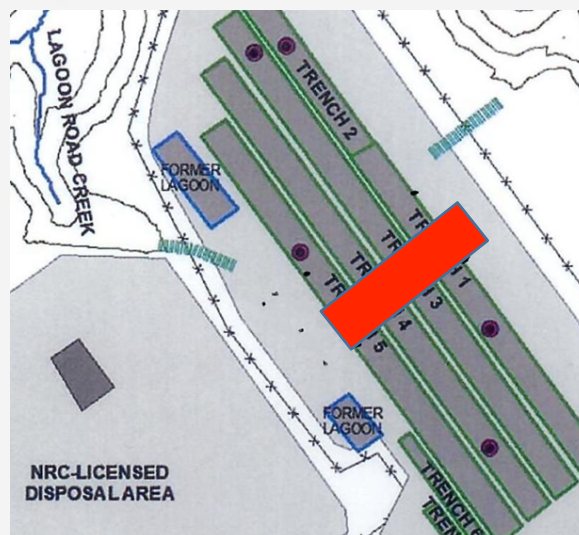
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Task 2.2.a: Geophysics Prove-Out Study



- Pilot Study Area is approximately 200' x 50'
- Selected to cover multiple trenches centered on Trench 4 due to make-up inventoried wastes
- Extends into soil horizon to evaluate differences in signal response.



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Task 2.4.b: Evaluation of Protective Measures



Purpose:

- Evaluate protective measures required for worker and community protection based on varied waste types in SDA and NDA
 - Evaluate potential exposure scenarios and levels
 - Evaluate level of protection needed
 - Evaluate exhumation equipment requirements
 - Compare to protective measures and exhumation equipment applied at other DOE sites (based on Study 3 findings)

Status:

- Draft report undergoing internal ECS review

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Task 3.1: Evaluation of Seven Selected Sites



Purpose:

- Determine state-of-practice in exhumation and treatment technologies; methods for worker, public, and environmental protection; and related costs at seven targeted sites
- Research projects that may have exhumed saturated waste
- Research retrievable storage projects

Status:

- Research completed on all targeted sites
- Report nearing completion

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PATH FORWARD



Study 1:

- Task 1.3 (Apply Waste Inventories to Selective Removal Scenarios) pending DOE and NYSERDA approval

Study 2:

- Complete geophysics prove-out study with recommendations for full-scale study
- Submit report on evaluation of SDA and NDA protective measures
- Develop Study Plan Addendum for soils investigation at SDA and NDA; Completion of field work in CY2016 is uncertain.

Study 3:

- Submit report detailing exhumation projects and applicability of findings to SDA, NDA, and WTF