

Focused Corrective Measures Study for the State-Licensed Disposal Area



CITIZEN TASK FORCE MEETING

June 23, 2010



Understanding the CMS

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Purpose: To assess and update existing studies, data, and information regarding RCRA hazardous constituents at the SDA to:

1. Verify historical and recently calculated data
2. Develop and evaluate corrective measure technologies
3. Provide recommendations on these technologies and alternatives

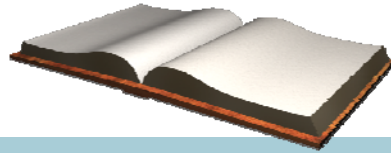
Required: Administrative Order On Consent (Consent Order)

Goal: To support a remedial action decision for the SDA by evaluating the potential hazardous constituents present at the SDA.

CMS Content

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- ❑ Assessment of Current SDA Conditions
- ❑ Development of Corrective Action Objectives
- ❑ Development of Corrective Measures Alternatives
- ❑ Assessment of Future Risks from Alternative Selection
- ❑ Recommendations of Corrective Measures
- ❑ Public Participation



Assessment of Current Conditions

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- Site Geology
- SDA Disposal Trenches and Lagoons
- SDA Waste Storage Facility
- Bulk-Storage Warehouse
- RCRA Facility Investigation Results

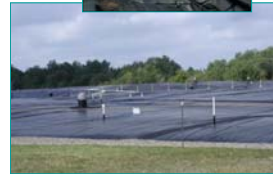


Corrective Action Objectives (CAOs)

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NYSERDA evaluated the SDA corrective measures technologies and alternatives against the following CAOs:

- ✓ Prevent or minimize the generation of additional leachate
- ✓ Prevent or minimize the release of leachate to groundwater and surface water
- ✓ Prevent human exposure to leachate and disposed wastes
- ✓ Provide detection and monitoring capabilities to demonstrate that the first three objective are met



Screening Criteria Alternatives

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Containment technologies consistent with the FEIS Phased Decisionmaking Alternative for the SDA were evaluated. The screening criteria include:

- ✓ Site-Specific Characteristics, including geology (e.g., low-permeability soils, adjacent creeks and wetlands, etc.)
- ✓ Leachate Characteristics (e.g., radioactive and hazardous constituents, disposal history, waste differences, etc.)
- ✓ Technological Considerations (e.g., performance record, constructability, operation and maintenance, etc.)



Identification of Containment Technologies

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- Infiltration Controls
- Site Stability Controls
- Leachate Management, Treatment and Disposition
- Institutional Controls
- Governmental Controls
- Monitoring Inspections



CMS Alternatives Evaluated

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- 1) **No Action** – No remedial actions or institutional controls (used as a baseline for comparative purposes)
- 2) **Containment with Exposed Geomembrane Cover and existing Slurry Wall** with Institutional Controls, Long-Term Monitoring and Site Stability Controls
- 3) **Containment with Exposed Geomembrane Cover and Slurry Wall Extension** with Institutional Controls, Long-Term Monitoring and Site Stability Controls



CMS Alternatives Findings

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- a) **No Action** – Used only for comparative purposes
- b) **Containment with Exposed Geomembrane Cover and Existing Slurry Wall**
 - a) Proven effective for containment
 - b) “Fate and Transport” model used in CMS concludes that the exceedance of groundwater standards at site boundary is unlikely
- c) **Containment with Exposed Geomembrane Cover and Slurry Wall Extension**
 - a) Proven effective for containment
 - b) Same “Fate and Transport” conclusions as stated above
 - c) Limited success given groundwater flow to the North Trenches
 - d) Increased Potential for Worker and Waste Impacts

Recommendation of CMS

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The **Containment with Exposed Geomembrane Cover and Existing Slurry Wall Alternative** was selected as the preferred alternative for implementation at the SDA, which includes:

- ❖ Retaining the existing geomembrane covers over the SDA and slurry wall to limit the movement of contamination and reduce infiltration into the trenches and the lagoons.
- ❖ Replacing the geomembrane covers as needed due to degradation from the sun and weather exposure (VLDPE geomembrane is being replaced in 2010).
- ❖ Implementing site stability controls, institutional controls, monitoring, inspections and maintenance.
- ❖ Maintaining the buffer zone around the perimeter of the SDA to ensure long-term access for monitoring and maintenance purposes, and to minimize erosion.
- ❖ Additional studies will be undertaken over the next 10 years to supplement the radiological performance assessment information being generated as part of the EIS.

Public Participation

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A key element of the CMS process is public participation. In addition to today's meeting and the June 4th public meeting, NYSERDA is performing the following public participation activities:

- ❑ As requested, NYSERDA will extend the public comment period for the Draft Focused CMS, initially published on June 4, 2010, for 30 days. The comment period will be extended from July 6, 2010 to August 6, 2010.
- ❑ NYSERDA will consider, evaluate and respond to all public comments in the preparation of the final Focused CMS Report.
- ❑ NYSERDA will submit the Final Focused CMS to the U.S. EPA and NYSDEC.
- ❑ A new Corrective Actions Permit will be issued to NYSERDA (by NYSDEC) in the near future.