Clinton Landfill Inc
Chemical Waste Landfill
PCB Disposal

Presentation to DeWitt County Land Use Committee
April 7, 2009 at 7:00PM, Clinton, IL

Steve Johnson, TSCA Permits, Geologist
Gary Cygan, Senior Geologist
Rafael Gonzalez, Community Involvement Coordinator
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Agenda

1) Status of Permit
2) Process for Decision
3) Schedule
4) Factual Information
Process Steps

- “IN REVIEW”… Which means the decision to approve the application has not been made.

- “Post Draft-Approval”… Which means we have enough information to support going public with the results.

- “Pre-Public Comment”… Which means we have not put together or made public an Administrative Record, the documents we considered in our review.
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<table>
<thead>
<tr>
<th>Process</th>
<th>Schedule</th>
<th>Status</th>
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<tbody>
<tr>
<td>Current activity</td>
<td>180 days</td>
<td>Completed 1/09</td>
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<tr>
<td>Review of application</td>
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<tr>
<td>EPA Notice of Deficiencies</td>
<td>120 days</td>
<td>Preliminary 9/08</td>
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<tr>
<td>Clinton response to NOD</td>
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<td>Final 12/09</td>
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<td></td>
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<td>Response 3/09</td>
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<tr>
<td>EPA review of response to NOD</td>
<td>30 days</td>
<td>Completed 3/09</td>
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<tr>
<td>Preparing preliminary decision (i.e. draft</td>
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<td>Rough Draft 3/19/09</td>
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<td>permit approval or denial)</td>
<td>(3/09)</td>
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<td>Public Meeting</td>
<td>Late April-Early May</td>
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<td>Public comment period</td>
<td>30 days</td>
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<td>(6/09) originally</td>
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<td>Addressing comments from public meeting</td>
<td>30 days</td>
<td>May-June/09 planned</td>
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<td>(8/09) Originally</td>
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<td>Final decision (i.e. final approval or</td>
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<td>June-July planned</td>
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<td>denial of permit)</td>
<td>(9/09) originally</td>
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- **Factual Information:**
  - Proposed PCB Cell
  - Mahomet Aquifer Regional Flow Direction
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IL Geology—glacial materials

Approximate boundary of Mahomet aquifer

- Clinton
- Clinton LF
- moraines
- clay pan #1
- clay pan #2
- moraine divide
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Geology of the Mahomet Aquifer

After Mahomet Aquifer Consortium
Early Illinois Episode basal sand (orange)

- Clinton
- Clinton LF
- clay pan #2
- moraine hills
- moraine divide
- sand

After Mahomet Aquifer Consortium
Pre-Illinois Episode Mahomet Sand (yellow)

Clinton

Clinton LF

Mahomet Aquifer

After Mahomet Aquifer Consortium
Topography of the Bedrock Surface

Clinton

Buried "Mahomet" Valley

Clinton LF

Mahomet Flow

After: Mahomet Aquifer Consortium
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- **Factual Information: Topography & Water**

![Map showing topography and water flow]

- **Well Field**
- **WWTP**
- **PCB Cell**
- **Monitoring Wells**

**Sites of Interest:**
- Clinton
- Clay Pan #1
- Surface Flow
- Mahomet Flow
- Weldon Flow
- Pan #1
- Pan #2
- Witness Flow
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Map, Cross-Section

Presented April 7, 2009 @ 7:00, DeWitt Co.
Land Use Committee, Clinton, IL
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- **Factual Information**: Landfill Engineering X-Section

![Diagram of landfill engineering X-section](image)

**NOTES:**
1. All geomembranes shall be double-sided textured.
Factual Information: Landslides

- Seismic and non-seismic case studies
Factual Information:
Search for Earthquake Evidence

*Quaternary geologist, David Grimley, examining exposures along a streambed during Grant Fork Quadrangle mapping east of St. Louis.*
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- Relevant Regulations, in part
  - Toxic Substances Control Act-PCB
    - Resource Conservation and Recovery Act-IL
    - Department of Transportation-Roads, Trains
    - Clean Water Act-Salt Creek
    - Endangered Species Act-Mussels
    - Data Quality Act-engineering
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- **Application**
  - Initial Application-4 volumes
  - Groundwater Impact Assessment 1 volume
  - Response to Notice of Deficiency 1 volume
  - Coordinate with IEPA RCRA Subtitle D modification Review
Sources of Information

- Mahomet Aquifer Consortium: Aquifer Character
- Illinois Water Survey Publications: Water supply
- Illinois Geological Survey Publications: Coal evaluation
- Illinois Department of Agriculture: Leaching vulnerability
- U.S. Army/EPA: Landfill Performance
- U.S. EPA Research and Development, Cincinnati Office: Containment and degradation of PCBs
- Professional Publication: Groundwater modeling
- U.S. Geological Survey: Topography, seismic maps
- Federal Emergency Management Agency: Fire safety
Summary

- Application Review is complete
- Evaluation of technical merits of application is complete
- TSCA Notice of Deficiencies Issued
- Applicant’s Response to Notice reviewed
- Findings support going public
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Factual Information: Geology
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Impacts of pumping on water levels (artesian head)

- Mahomet aquifer

- High-capacity well

- Low-capacity well

- Glacial till

- Dewatered aquifer

- Mahomet aquifer
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A Guide to Coal Availability and Resource Development in Illinois
Springfield (No. 5) Coal

Steven R. Gustison, Philip M. Johanes, Robert J. Finley, Illinois State Geological Survey

DeWitt
Clinton LF