Lime Plant Residuals as Landfill Cover

Public and private collaboration providing a win-win-win
John Pasquarette

Environmental Manager, Division of Materials and Waste Management, Ohio EPA
(419) 373-3057
John.Pasquarette@epa.ohio.gov
Presentation Outline

• Background on Lime Industry
• Background on Mississippi Lime
• Alternative Daily Cover (ADC) program
• Fee challenges
• Approvals granted
• Results
Presentation Outline

• Background on Lime Industry
• Background on Mississippi Lime
• Alternative Daily Cover (ADC) program
• Fee challenges
• Approvals granted
• Results
Cross section of a typical rotary kiln

Limestone added at the top
Product collected at the Bottom
Waste removed from Exhaust Gas
Lime Plants

• Eight in Ohio
• Seven in NW Ohio
• One without a quarry
Presentation Outline

• Background on Lime Industry
• Background on Mississippi Lime
• Alternative Daily Cover (ADC) program
• Fee challenges
• Approvals granted
• Results
Location

Huron, Ohio

Mouth of the Huron River
Mississippi Lime Plant

- Originally Owned and Operated by Huron Lime
- Huron Lime took the waste to captive landfills
- None of the air pollution control waste disposed since 1994
- Sold to Mississippi Lime 2014
- Mississippi Lime increased allowable production
- Ag Lime uses no longer utilized all of the material
The Challenge

• All of the material could not be used as Ag Lime
• No quarry
• Additional cost-effective outlets needed
Presentation Outline

• Background on Lime Industry
• Background on Mississippi Lime
• Alternative Daily Cover (ADC) program
• Fee challenges
• Approvals granted
• Results
Daily cover applied at the end of each day
Typically 6” soil layer
Alternatives can be used “if approved by the Director”
Tarps, spray-on products (F)(3)(b)
Soil-like wastes (F)(3)(a)
Ohio EPA, Mississippi Lime, and local Landfills collaborate
Alternative Daily Cover Requests

• Prepared and submitted by Republic and Erie County

• 6-month trial approvals drafted

• What about fees?
Presentation Outline

• Background on Lime Industry
• Background on Mississippi Lime
• Alternative Daily Cover (ADC) program
• Fee challenges
• Approvals granted
• Results
Disposal or Use?

• Under current paradigm, even when “used” as a daily cover, the material is still viewed to be “disposed”

• Disposed solid waste is subject to fees
Solid Waste fees

- State Disposal Fee
- Solid Waste District Generation/Disposal Fee

- However, if fees were required to be collected and remitted then the project would likely fail.
Coordination with Applicable Solid Waste Management Districts

• Meeting(s) held May 18, 2016 at the Erie County Solid Waste Management District. Attendees:
  • Mississippi Lime
  • Ohio EPA
  • Erie County Landfill
  • Erie County Solid Waste Management District
  • Republic
  • Ottawa-Sandusky-Seneca Solid Waste Management District
Presentation Outline

• Background on Lime Industry
• Background on Mississippi Lime
• Alternative Daily Cover (ADC) program
• Fee challenges
• Approvals granted
• Results
Approvals Granted

• Erie County Landfill
  • Issued November 8, 2016

• Port Clinton Landfill
  • Issued January 18, 2017
Presentation Outline

• Background on Lime Industry
• Background on Mississippi Lime
• Alternative Daily Cover (ADC) program
• Fee challenges
• Approvals granted
• Results
Photo from Erie County Landfill
Photo from Port Clinton Landfill
Results

- Both facilities have used the material.
- Both are satisfied that it functions well as a soil replacement for daily cover.
- Both are asking for long term authorization to be able to use the material
- Transportation costs are a challenge
- Additional “outlets” may be needed to manage all of the excess
John Pasquarette
Environmental Manager, Division of Materials and Waste Management, Ohio EPA
(419) 373-3057
John.Pasquarette@epa.ohio.gov
QUESTIONS