Public Meeting
on California’s Strategy for Compliance with New Federal Requirements for Municipal Solid Waste Landfills

California Air Resources Board
January 10, 2017 – Cal/EPA Headquarters
Presentation Overview

- Background
- Key Emission Guideline Revisions
- Compliance Strategy Concepts
- Next Steps
- Questions

If attending via webcast, send questions to: sierrarm@calepa.ca.gov
Purpose of the federal landfill rules is to reduce landfill gas emissions, which contains non-methane organic compound emissions and methane emissions, from MSW landfills.
New Source Performance Standards (NSPS)

Federal Rules for New Municipal Solid Waste (MSW) Landfills

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<tbody>
<tr>
<td>MSW landfills for which construction, reconstruction, or modification commenced on or after May 30, 1991</td>
<td>MSW landfills for which construction, reconstruction, or modification commenced after July 17, 2014</td>
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both Subparts continue to apply
### Emission Guidelines (EG)

**Federal Rules for Existing MSW Landfills**

<table>
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<th>Promulgated in 1996 40 CFR Subpart Cc</th>
<th>Promulgated August 2016 40 CFR Subpart Cf</th>
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<td>MSW landfills that accepted waste after November 8, 1987, and commenced construction, reconstruction, or modification on, or before May 30, 1991</td>
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Subpart Cf REPLACES Cc
Background

**Federal Rules for Landfills**

- Clean Air Act Section 111(d) requires states to submit plans detailing implementation of Emission Guidelines for existing landfills.
- November 22, 1999, U.S. EPA approved California’s State Plan for previous Subpart Cc.
Background

**Federal Rules for Landfills**

Requirements for newly promulgated Subpart Cf are similar to Subpart XXX, except it:

- Contains different definitions and a new “closed landfill subcategory”
- Is written as “instructions” to the State
- Requires states to submit an updated plan, due

May 30, 2017
State Plans

Major Components of State Plan

- Legal Basis and Authority; Identification of Enforceable Mechanism
- Emission Standards and Compliance Schedules
- Test Methods; Monitoring, Recordkeeping and Reporting Requirements
State Plans

**Major Components of State Plan**

- Legally Enforceable Increments of Progress Towards Compliance
- Source and Emission Inventories
- Annual Emission Reporting and Progress Reports
State Plans

**Major Components of State Plan**

- Public Participation
- Process for Review and Approval of Site-Specific Gas Collection and Control System Design Plans
Key Emission Guideline Revisions
Key Emission Guideline Revisions

NMOC Emission Threshold

- 50 Mg/yr threshold which triggers the need for a gas collection and control system (GCCS) was lowered to 34 Mg/yr, except for:
  - Landfills in the “closed landfill subcategory” NMOC threshold is 50 Mg/yr

Landfill Gas Treatment

- New definition
- Treatment system monitoring plan
Key Emission Guideline Revisions

**Surface Emissions Monitoring**
- All penetration points must be monitored
- Latitude and longitude must be recorded for each exceedance location

**Tier 4**
- Surface demonstration test to determine if a GCCS is required to be installed once NMOC emissions equal or exceed 34 Mg/yr
Key Emission Guideline Revisions

**Wellhead Criteria**
- Must monitor oxygen, nitrogen and temperature and wellhead pressure
  - Wellhead monitoring thresholds for oxygen and nitrogen have been removed

**Criteria for Removing GCCS**
- Landfill must be closed
- GCCS operated 15 years
- NMOC <34 Mg/yr (<50 Mg/yr for closed landfill subcategory)
Key Emission Guideline Revisions

- **Startup, Shutdown, and Malfunction**
  - Surface demonstration test to determine if a GCCS is required to be installed once NMOC emissions exceed 34 Mg/yr.

- **Rule Clarifications and Minor Changes**
  - Design Plans
  - Electronic Reporting
  - Test Methods
  - Waste Definitions
Key Emission Guideline Revisions

Rule Clarifications and Minor Changes

- Liquids Addition Landfills
- Portable Meters
- Low-Producing Areas
Compliance Strategy Concepts
Compliance Strategy Concepts

**Updated State Plan**

- Air Resources Board and local air districts have until May 30, 2017, to prepare and submit a revised State Plan.
- U.S. EPA has an additional four months to approve or disapprove the State Plan.
- With public input, compliance strategy developed by Landfill Workgroup.
Considering One of Two Paths

Two Potential Paths:

- Equivalency Determination
  - Show ARB’s Landfill Methane Regulation satisfies Subpart Cf Requirements; or

- Districts Revise their Landfill Rules
  - ARB works with districts to revise their existing landfill rules to implement the new Emission Guidelines
Potential Path 1

**Equivalency Determination**

- Landfill Methane Regulation
  - Applies to more landfills than Subpart Cf
  - More stringent requirements for methane collection and control, component leak testing, surface emissions monitoring, and compliance times than Subpart Cf
  - Already being implemented by ARB and air districts
Potential Path 1

Equivalency Determination

Benefits of Equivalency

- Reduces regulatory burden
- Simplifies compliance with state and federal regulations

Requires coordination with EPA
Potential Path 2

Revision of District Landfill Rules

ARB provides technical guidance to Districts:

- Replace outdated references in current district landfill rules.
- ARB assists districts as necessary in adopting rules.
Environmental Justice Concerns

Environmental Justice Advisory Committee

- Staff do not anticipate increased impacts to disadvantaged communities, regardless of chosen compliance path
- Ensures state actions do not negatively impact disadvantaged communities
Next Steps
Next Steps

- Solicit written Public Comments until 5:00PM February 10, 2017
- Continue to work with the Landfill Workgroup on developing a compliance strategy
- Feb or March – Second Public Meeting to present staff’s recommendations
- April 2017 – ARB informational hearing to consider staff proposed plan
- May 30, 2017 – Submittal of proposed State Plan to U.S. EPA for approval
Contacts

Submit comments and sign up for landfill listserv at ARB’s Landfill Website:  
http://www.arb.ca.gov/cc/landfills/landfills.htm

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Questions During the Meeting may be Emailed to:
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Submit Written Comments by February 10, 2017 to ARB’s Landfill Webpage:
http://www.arb.ca.gov/cc/landfills/landfills.htm