



**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

Background

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

Promulgated in 1996 40 CFR Subpart WWW	Promulgated August 2016 40 CFR Subpart XXX
MSW landfills for which construction, reconstruction, or modification commenced on or after May 30, 1991	MSW landfills for which construction, reconstruction, or modification commenced after July 17, 2014

Both Subparts continue to apply

Emission Guidelines (EG)

Federal Rules for Existing MSW Landfills

Promulgated in 1996 40 CFR Subpart Cc	Promulgated August 2016 40 CFR Subpart Cf
MSW landfills that accepted waste after November 9, 1987, and commenced construction, reconstruction, or modification on, or before May 30,	MSW landfills that accepted waste after November 9, 1987, and commenced construction, reconstruction, or modification on, or before July 17, 2014

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 Plans

- 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 Plans

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

State Plans

Major Components of State Plans

- 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 Guidelines 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
- NMVOC < 54 mg/yf (< 50 Mg/yf for closed landfill)

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 Guidelines Revisions

■ Rule Clarifications and Minor Changes

■ Liquids Addition Landfills

■ Portable Meters

■ Low-Pressure Wind Action

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

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

Equivalency Determination

- Benefits of Equivalency
 - Reduces regulatory burden
 - Simplifies compliance with state and federal regulations
- Requires coordination with EPA

Potential Path

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 – Submission of proposed State
Plan for ARB 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
January 11, 2017 to ARB's

Landfill Webpage

<http://www.arb.ca.gov/cc/landfills/landfills.htm>