SCS ENGINEERS



UPDATED NSPS (GAS COLLECTION) RULES FOR LANDFILLS



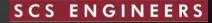
September 27, 2016/December 9, 2016

Presented by:

David Mezzacappa, P.E./Marcia Pincus, P.E.

NSPS/EG Rules

- Proposed July 17, 2014 and August 27, 2015
- Final August 29, 2016
- NSPS Subpart XXX (40 CFR Part 60)
 - Applies to New, Modified, or Reconstructed Landfills <u>on or after</u> July 17, 2014
 - Modification means an increase in the permitted volume design capacity of the landfill by either lateral or vertical expansion based on its permitted design capacity as of July 17, 2014. Modification does not occur until the owner or operator commences construction on the lateral or vertical expansion.



NSPS/EG Rules continued

EG Subpart Cf (40 CFR Part 60)

- Replacing Subpart WWW (NSPS) & Cc (EG)
- Applies to Existing Landfills Accepted Waste after November 8, 1987 and Began Construction, Reconstruction or Modification <u>before</u> July 17, 2014
- NSPS and EG have same Technical Requirements

EG Subpart Cf Schedule

EPA will Develop Federal Plan:

- Federal Plan will almost Certainly have Same Technical Requirements as Subpart Cf
- Federal Plan due by November 2017
- Each State/Delegated Authority May:

(1) Prepare a "Local Plan" that conforms to Subpart Cf, OR

(2) Adopt the (yet to be Issued) Federal Plan

Local/State Plans:

- Until May 29, 2017 to Submit Plan to US EPA for Approval
- > EPA has 4 Months to <u>Review</u> the Plan
- If Needed, 2 Months to Address EPA Comments and <u>Revise</u> Plan
- Effective no later than November 2017?



Major Provisions of Rule

Landfill Sizes that Trigger Rule Provisions
Remain the same - 2.5 million Mg and m³
NMOC Emissions Threshold to Control LFG
Reduced from 50 Mg/year down to <u>34 Mg/year</u>
Closed Landfills Remain at 50 Mg/year (Subcategory)



Electronic Reporting

Requiring Electronic Reporting

- EPA Central Data Exchange (CDX)
- Compliance & Emissions Data Reporting Interface (CEDRI)

Following Reports Required:

- NMOC Emissions Rate Reports
- Annual Reports
- Performance Tests
- Tier 4
- Liquids Recirculation/Additions Data

Almost Always Very Difficult to Get Going



Tier 4 Demonstration

- Tier 1, 2, 3 Remain the Same to Calculate NMOC Emissions
- Sites Between 34 50 Mg/yr Eligible for new Tier 4
 - Can Skip from Tier 2 to Tier 4
 - Cannot go back to Earlier Tiers After Tier 4



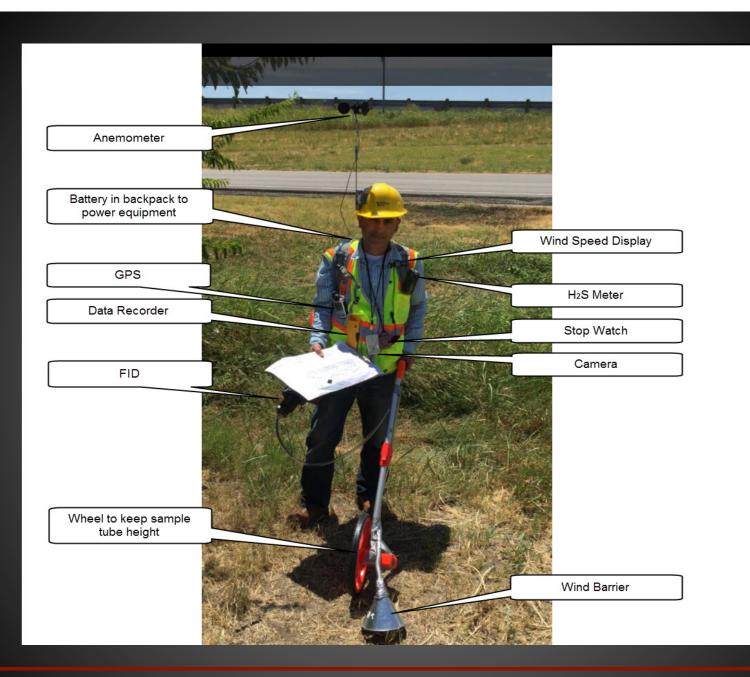


Tier 4 Demonstration

- Surface Scan (30-Meter Intervals/Penetrations)
- Must Perform 4 Quarterly Readings per Year
- No Exceedances Above 500 ppm. Must continue doing until landfill closed even if <500 ppm
- Continue to Report NMOC Emissions Annually
- Wind Speed Limits/Shield Required
- Can Leave Existing GCCS On
- Requires Notification of Testing/Electronic Reporting
- Requires Meticulous Recordkeeping
- If Fail, Install GCCS 30 Months After NMOC Report >34 Mg/ yr (50 Mg if closed)

SEMS

- My Personal Experience:
 - LFG Rates in NM landfills with extraction systems on average are 1/3 EPA's LandGem model.
 - SEMs in NM rare to get an exceedance of 500 ppm of methane. Most readings don't exceed 300 ppm. Average readings below 100 ppm.



Closed Landfill Subcategory

- In EG Rule, MSW Landfills Closed by September 27, 2017 (13 Months after EG Rules Published) Continue with 50 Mg/yr NMOC threshold
 - Closed Landfill Must Have Submitted NSPS Closure Report as Specified by 40 CFR 60.38(f)
 - Not Available to NSPS Landfills



Closed Landfill Subcategory

Implementation Issues and Next Steps?

- Ensure Existing Closed Landfills that are not Already Subject to the Rule are not Pulled into the New Rule
 - Need to Ensure Current Closed Landfills have proper Documentation to Support Exemption
 - NMOC Reports/Closure Documentation



GCCS Design Plan

- GCCS Design Plans Still Required
 - Now Requires only Notification and Signature Page Certifying it when Completed
 - If no Contact in 90 Days or told that no Review Needed Owner Continues at Own Risk
- When Must GCCS Design Plans be Updated?
 - 90 Days of Expanding GCCS to Area not Previously Covered in Plan
- Flexibilities May Require Approval/Updates

First Steps?

- Verify Whether Landfill is "New" and Subject to NSPS XXX
- If Closed Check Documentation
- If NSPS Site Should have resubmitted Design Capacity and NMOC Reports (Tier 1 and Tier 2) by November 28, 2016
- Tier 2 Report Greater than 34 Mg/yr? Retest?
- Consider Tier 3?
- If under 50 Mg/yr Consider Surface Emissions Alternative (new Tier 4)?

New Mexico's Plan

- By May 30, 2017, NMED must submit an amended state plan implementing these guidelines
 - Amended Part 64 Municipal Solid Waste Landfills
 - Effectively takes delegation of most compliance provisions
 - EPA retains authority to enforce, along with the State
- Requirement for public comment period (December)
- Requirement for public hearing (April or May)

QUESTIONS?



<u>MPincus@SCSengineers.com</u> <u>DMezzacappa@SCSEngineers.com</u>

