SCS ENGINEERS















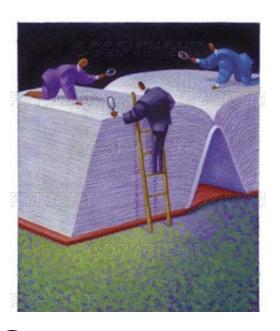
New NSPS and EG Rules for Landfills

Presented by J Morgan, PE

SC SWANA Spring Conference May 2017

The New NSPS/EG

Just an Overview





Good News: If you know WWW, you may already be familiar with most of the requirements

New & Improved

- The New Rules
 - What exactly is changing?
- Applicability
 - What does this have to do with me?
- Regulation Overview
 - ➤ What do I have to do?
- Schedule
 - ➤ When does it happen to me?
- Next Steps
 - ➤ What do I have to do next?

The Good, The Bad, and The Ugly



NSPS/EG Rules

- NSPS Subpart XXX (40 CFR Part 60)
 Applies to New, Modified or Reconstructed landfills after July 17, 2014
- EG Subpart Cf (40 CFR Part 60)
 Applies to existing landfills accepted waste after 11-8-1987 and began construction, reconstruction or modification before July 17, 2014
- NSPS XXX and EG have same Technical Requirements

NSPS/EG Rules – New Items

- New NMOC Threshold
- Electronic Reporting Requirement
- New testing option Tier 4 (in theory, at least)
- Alternative Timelines Clarification
- Unresolved Issues

Schedule

- Published August 29, 2016 in Federal Register
- NSPS XXX final and effective 60 days from publication (October 28, 2016)
- For EG Cf, States have 9 months from publication to submit Plans (May 30, 2017)
- EPA has 4 months to review and approve
- Waiting on EPA to propose Federal Plan
- Waiting on EPA to revise 40 CFR Part 63
 Subpart AAAA (Landfill NESHAPs)

Hang In There!



XXX Applicability

 No change to design capacity thresholds of 2.5 million Mg and m³

 New or modified after July 17, 2014 (may lack regulatory clarity/potential for different interpretations)

XXX Applicability (cont.)

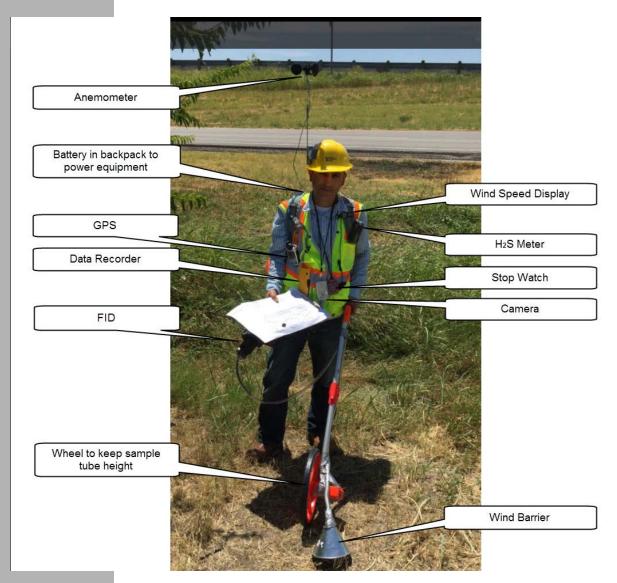
 Interpretation: first construction activity that is uniquely for the new capacity

 NMOC threshold: 34 Mg/year (except closed sites, which remain at 50 Mg/yr)

Initial Design Capacity and NMOC Reports

- Due 90 days from publication date (11/28/16)
- NMOC report can be Tier 1 or 2; Tier 2 values still valid for 5 years
- If exceed 34 Mg/year (or 50 Mg/year), may want to reserve right to do additional Tier 2 and/or Tier 4

Tier 4 Demonstration



- Picture of Possible Equipment Needed (rule is unclear)
- Wind speed disqualifications
- Any exceedance disqualifies the demonstration

GCCS Design Plans

- Initial plan due one year from first exceeding 34 or 50 Mg/year
 - November 28, 2017 unless NMOC under threshold
- Interpretation: Submit cover letter with attached PE signature/stamp page
 - Cover only new requirements; reference existing GCCS Plans and approvals
 - > Agency can require submittal within 90 days
- Updates required:
 - ➤ Within 90 days of expansion into new area
 - ➤ If GCCS modifications not consistent with plan

GCCS Design Plans

"AT YOUR OWN RISK"



"...if the Administrator indicates that submission is not required or doesn't respond within 90 days, the landfill owner or operator can continue to implement the plan with the recognition that they are proceeding at their own risk. In the event that the design plan is required to be modified to obtain approval, the owner/operator must take any steps necessary to conform any prior actions to the approved design plan and any failure to do so could result in an enforcement action."

p63 of the preamble of new rule-making

Wet Landfills

- Not defined but identified as landfills that accept liquids (RD&D) or recirculate leachate
- Triggered by exceeding design capacity threshold, not NMOC threshold
- Any liquids in last 10 years; back reporting
- Reporting: volume recirculated/added, surface area of application, and waste acceptance in area
- First report: 13 months from commence construction or September 27, 2017 and annual thereafter

Wet Landfills (cont.)

Collect Data (Annual Reporting Online)

- Volume Recirculated Definition not Include Dust Control
- ➤ Quantity Based Records or Engineering Estimates
- Surface Area and Waste in Mg in Recirculation Area
- ➤ Waste Disposed of Annually in Recirculation Areas



Treatment Exemption

- Filtration, dewatering, compression for beneficial use
- No numeric limits or monitoring
- Clarified beneficial end-use dictates level of treatment
- Clarified end-user of treated gas not subject to rule; end user must follow applicable rules (i.e., ZZZZ, JJJJ)
- Treatment system monitoring plan required

Wellhead Standards

- Removal of Oxygen/Nitrogen Limit
 - Monthly monitoring still required
 - Exceedances no longer require corrective action or reporting; must maintain records on-site
- Corrective Action still applies to temp and pressure

Wellhead Timelines

- Well Corrections for Temperature and Pressure
 - Rules say 5 Days for Initial Adjustment and 15 Days to get into Operating Range
- New Tiered System for Alternative Timeframes
 - 15 Days (Standard In Rule)
 - Between 15-60 Days
 - ➤ Between 60-120 Days (submit w/in 75 Days if expected to be >120)
 - 120 Days

SEM –Standard Events

Sites with Required GCCS

- Still Quarterly 500 ppmv
- No Integrated Sampling/Numerical Wind Limits
- Must Report Longitude/Latitude of Each Exceedance
- Instrument accuracy of at least +/- 4 meters
- Coordinates must be in decimal degrees with at least five decimal places
- Follow-Up Requirements for Exceedances Still the Same

SEM – Standard Events (cont.)

- All penetrations/open areas must be monitored
 - ➤ Quarterly
 - > Not defined but
 - Includes Wellheads, Leachate Risers, Gas System Penetrations
 - Does NOT Include: Litter Fencing, Flags, Signs, Trees, Utility Poles

SSM Changes

- Loss of SSM Exemption
 - > The provisions of this Subpart apply at all times including SSM
- 5-day GCCS/1-hour control device downtime limits are gone
- Work practice standards must be implemented during SSM
 - Gas mover must be shutdown within one hour of control system offline
- SSM provisions for monitoring equipment: malfunctions, repairs, and QA/QC
- This will be key issue to be debated with EPA; concerns regarding different interpretations by regions and states

SSM Changes (cont.)

- What are the Implementation Issues?
 - Without 1-hour and 5-day limits, is unlimited GCCS downtime allowed?
 - Can state/local agencies impose their own limits in the absence of any in federal rules?
 - Will EPA be updating Landfill NESHAPs rule to accommodate this change in NSPS/EG rules?
 - Do SSM plans need updating? What needs to be included in SSM reports?
 - Some follow-up with EPA necessary to clarify some of these issues.

First Steps?

- Verify Whether Landfill is "New" and Subject to NSPS XXX
- If New XXX Site will be Required to Resubmit Design Capacity and NMOC Reports (Tier 1 and/or Tier 2)
- Start collecting wet site data
- Once over NMOC threshold, file Initial GCCS Design Plan
- Use entire 30-month window

If Not "New"

- EG Rules Cover "Existing" Sites
- States/Local 9 Months to Finalize EG
- EPA 4 Months to Review and Comment & 6 Months to Finalize a Federal EG
- Then 2 Months for Corrections by State/Local
 - Late 2020 before Gas System Required
 - Until Current NSPS or EG (WWW or state)
 - Timeline Might be Longer (was in 1990's)
 - State/Local may ask for Extension
 - New NMOC/Design Capacity Reports Likely



Issues

- EPA has issued no guidance
- NESHAPs remains applicable for current NSPS and EG sites
 - EPA says that XXX and WWW could be in effect for same site
 - Not on current EPA schedule for revision
- Submittal and approval of GCCS Design Plans and at risk issue
- Submittal and agency authority over treatment system plans
- SSM changes and whether regions/states can make their own limits
- Wet landfills: no clear definition, triggered just with design capacity exceedance
- Tier 4 Feasibility

"No one said the rules had to make sense"

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Closing



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