

June 2021
NSPS/EG Rule Summary for
Landfills

Applicable to all Landfills located in States
without approved State Plans

NSPS/EG Rules

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

Timeline

- Published August 29, 2016 in Federal Register
- NSPS XXX final and effective 60 days from publication (October 28, 2016)
- For EG Subpart Cf, States had 9 months from publication to submit Plans (May 30, 2017)
- States that have not yet submitted plans are required to comply with the Federal Plan (until a state plan is submitted and approved by EPA)
 - EPA published the Federal Plan under 40 CFR Part 62, Subpart OOO on May 21, 2021
 - Becomes effective June 21, 2021

Old vs. New

Old Rules	New Rules
<p><u>NSPS Subpart WWW</u> – Applies to new, modified, or reconstructed landfills that received waste on or after May 30, 1991 but before July 18, 2014</p>	<p><u>NSPS Subpart XXX</u> – Applies to new, modified, or reconstructed landfills that commenced after July 17, 2014</p>
<p><u>EG Subpart Cc</u> – Applies to landfills that were constructed, reconstructed, or modified before May 30, 1991</p> <p>Federal Plan: 40 CFR 62 Subpart GGG</p>	<p><u>EG Subpart Cf</u> – applies to existing landfills that have accepted waste after November 8, 1987 and began construction, reconstruction, or modification before July 17, 2014</p> <p>Federal Plan: 40 CFR 62 Subpart OOO</p>

EG Subpart Cf Applicability

- Existing landfills that have accepted waste after November 8, 1987 and began construction, reconstruction, or modification before July 17, 2014
- Landfills with a design capacity equal to or greater than 2.5 million Mg (2.5 million m³)
- NMOC Threshold for GCCS installation and operation:
 - Reduced from 50 Mg/yr to 34 Mg/yr
 - Exception: existing, closed landfills

Initial Submittal Deadlines

- “Legacy Controlled Landfills”
 - No additional initial submittals required
 - Compliance with Federal Plan by June 21, 2021
- Non “Legacy Controlled Landfills”
 - September 20, 2021
 - Initial Design Capacity Report
 - Initial NMOC Emission Rate Report (if applicable by design capacity)

GCCS Requirements Timeline

- From date of NMOC report triggering GCCS requirements (more detailed time requirements):
 - 12 months: Submit GCCS Design Plan
 - 20 months: Award contract or submit orders for GCCS components
 - 24 months: Begin GCCS construction
 - 30 months: Complete GCCS construction/installation

Note: Landfills having triggered GCCS requirements under WWW, Cc, or GGG can use remaining amount of 30 month window to complete requirements

Other Key Changes

- LFG Treatment: Develop treatment system monitoring plan addressing treatment criteria.
- Surface Emissions Monitoring (SEM): New requirements:
 - monitor all surface penetrations in landfill cover (e.g. wellheads)
 - Record coordinates of exceedances within +/- 4 m accuracy

Other Key Changes

- Tier 4: New methodology to assess GCCS requirements (NMOC emissions: 35 - 50 Mg/yr):
 - Initial monitoring period: 4 quarters of SEM with no exceedance of 500 ppmv threshold for CH₄
 - If active site: continued quarterly SEM events
 - If closed site: annual SEM
 - Must be conducted under specific wind conditions and include wind speed monitoring
 - Must provide notification of test dates and submit annual reports of results

Other Key Changes

- Wellhead criteria:
 - O₂: Removed 5% by vol. limit but monthly monitoring still required
 - Pressure: unchanged
 - Temperature: unchanged
- Corrective action requirements for exceedances:
 - If not corrected within 15 days: conduct root cause analysis
 - If not corrected within 60 days: develop corrective action analysis with schedule for implementing corrective action within 120 days
 - If more than 120 days needed: need Administrator approval and to submit root cause and corrective action analyses and schedule within 75 days

Other Key Changes

- Criteria for Removing GCCS:
 1. Closed landfill;
 2. GCCS operation for 15 years or else demonstrate that it could not be operated due to declining flow; and
 3. NMOC emission rate $< 34 \text{ Mg/yr}$ for 3 consecutive test dates

Other Key Changes

- Removal of SSM Exemption:
 - Rules apply at all times including periods of SSM
 - Previously allowed landfills to avoid non-compliance during SSM events
 - New work practice standard:
 - Shut down GCCS and close all valves to prohibit venting to atmosphere within 1 hr
 - Report all periods of GCCS downtime, not just those exceeding 1 hr

Other Key Changes

- GCCS Design Plan:
 - Updates required:
 - within 90 days of expansion of GCCS into new area; or
 - If changes made to GCCS not consistent with current GCCS Design Plan
 - Must notify EPA and submit the signature page signed by PE
 - EPA has 90 days to review and request full copy

Other Key Changes

- Electronic Reporting*:
 - Now required through EPA's CDX using CEDRI for all:
 - Performance tests
 - NMOC emission rate reports
 - Tier 4 reports
 - Wet landfilling practices

*Required once templates become available

Other Key Changes

- NMOC testing:
 - EPA Method 25A allowed for testing low NMOC concentrations on device outlets
 - EPA Method 18 only allowed if used in conjunction with Method 25A

Other Key Changes

- Updated waste definitions for household waste and segregated yard waste
- Wet landfills: landfills that recirculate leachate or accept liquids (in past 10 years)
 - Additional recordkeeping and reporting
- Allowed use of portable gas meters for compliance with EPA methods 3A and 3C
- Low producing areas < 1% total landfill NMOC emissions for removal from GCCS

Recommendations

- Complete 2nd quarter SEM events prior to June 20, 2021, and begin complying with updated SEM requirements in the 3rd quarter
- If under 34 Mg/yr NMOC threshold, submit Design Capacity Report and NMOC Emission Rate Report by September 20, 2021
- Begin permit modification process to incorporate new requirements if necessary

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