

Who? What? When? Where? Why?

Solving the Mystery of Landfill Air Regulations, Permitting, & Compliance

NSPS & NESHAP Regulations



That's a lot of Regulations!!!

NSPS Subpart WWW

NMOC > 50 Mg

Oxygen < 5%
Negative Pressure
Temp < 131F

Tier 1, 2, 3
Monthly Monitoring
Quarterly SEM
Annual Reports

Alternate Compliance
Timelines
Higher Operating
Values

- Landfills that commenced construction, reconstruction, or modification after 5/30/1991
- Final Rule Published 3/12/1996
- Amended 6/16/1998, 2/24/1999, 4/10/2000, 10/17/2000, 9/21/2006
- MSW Landfill with Design Capacity of 2.5 million megagrams or 2.5 million cubic meters
- Applies at all times except during periods of SSM provided the SSM periods are < 5 days for collection system and <1 hour for treatment or control devices
- Includes: Operational, Compliance, Monitoring, Recordkeeping, Testing, and Reporting Requirements
- Lists Specifications for Active GCCS Collection Systems

EG Cc/Federal Plan GGG

NMOC > 50 Mg

Oxygen < 5%
Negative Pressure
Temp < 131F

Tier 1, 2, 3
Monthly Monitoring
Quarterly SEM
Annual Reports

Alternate Compliance
Timelines
Higher Operating
Values

- Landfills that commenced construction, reconstruction, or modification before May 30, 1991
- Emissions Guidelines Published 3/12/1996 and Amended 6/16/1998
- Federal Plan Published 11/8/1999
- If state has Approved and Effective State EG Cc plan, then that applies instead of Federal Plan GGG
- 32 State/Local Plans Approved for EG Cc
- Same requirements as NSPS Subpart WWW
- Upon expansion, landfill will be subject to NSPS Subpart WWW

NESHAP AAAA (Old AAAA - pre 9/28/2021)

NMOC > 50 Mg

Oxygen < 5%
Negative Pressure
Temp < 131F

Tier 1, 2, 3
Monthly Monitoring
Quarterly SEM
Semi-Annual Reports

Alternate Compliance
Timelines
Higher Operating
Values

- Final Rule Published 1/16/2003
- Applies to major and area sources of HAPs
- Contains the same requirements as the EG Cc and NSPS Subpart WWW
- Requires Compliance with NSPS Subpart WWW
- Adds Startup, Shutdown, and Malfunction (SSM) Requirements
- No longer required to comply when you are no longer required to apply controls under NSPS Subpart WWW or the Federal Plan or EPA approved State Plan or Tribal Plan implementing EG Cc

NSPS Subpart XXX

NMOC > 34 Mg

No Oxygen Target
Negative Pressure
Temp < 131F

Tier 1, 2, 3, 4
Monthly Monitoring
Quarterly SEM w/
Penetrations
Annual Reports

Root Cause
Corrective Action
LFG Treatment
System Plan
Liquids Reporting

- Landfills that commenced construction, reconstruction, or modification after 7/17/2014
- Final Rule Published 8/29/2016
- Effective 10/28/ 2016
- Applies at all times, including periods of SSM
- Additional Tier 4 NMOC Demonstration option
- Mark and record location and concentration of any SEM exceedances
- SEM includes penetrations and exceedances need GPS coordinates to 5 decimal places
- Root Cause Analysis (RCA) within 60 days of exceedance
- Corrective Action Analysis (CAA) and Implementation Schedule within 75 days of initial exceedance
- Exceedances beyond 120 days, submit RCA, CAA, and Implementation Schedule for approval within 75 days of initial exceedance

EG Cf/Federal Plan 000

NMOC > 34 Mg

No Oxygen Target
Negative Pressure
Temp < 131F

Tier 1, 2, 3, 4
Monthly Monitoring
Quarterly SEM w/
Penetrations
Annual Reports

Root Cause
Corrective Action
LFG Treatment
System Plan
Liquids Reporting

- Landfills that have accepted waste on or after November 8, 1987, but have not commenced construction, reconstruction or modification after 7/17/2014
- Final Rule Published 5/21/2021
- Effective : 6/21/2021
- Applies at all times, including periods of SSM
- Additional Tier 4 NMOC Demonstration option
- Mark and record location and concentration of any SEM exceedances
- SEM includes penetrations and exceedances need GPS coordinates to 5 decimal places
- Root Cause Analysis (RCA) within 60 days of exceedance
- Corrective Action Analysis (CAA) and Implementation Schedule within 75 days of initial exceedance
- Exceedances beyond 120 days, submit RCA, CAA, and Implementation Schedule for approval within 75 days of initial exceedance

NESHAP AAAA (New AAAA - post 9/28/2021)

NMOC > 50 Mg

No Oxygen Target
Negative Pressure
Temp < 145F

Tier 1, 2, 3, 4
Monthly Monitoring
Quarterly SEM
Annual Reports

Root Cause Analysis
Corrective Action
Enhanced
Temperature
Monitoring

- Final Rule Published 3/26/2020, Technical Correction 10/13/2020, Proposed Correction 4/8/2021
- Includes requirements that are effective 9/28/2021
- Prior to 9/28/2021, comply with NSPS Subpart WW or State Plan - after 9/27/2021 comply with New AAAA
- Initial Report not required if already submitted pursuant to NSPS Subparts WWW and/or XXX
- Applies at all times, including periods of SSM
- During periods of SSM, must comply with Work Practice Standards
- Includes LFG Treatment System Requirements
- Enhanced Temperature Monitoring for Wells > 145F and additional requirements for Wells > 165F
- Notify Administrator within 24 hours of a Well > 170F w/ CO concentration > 1000 ppmv

NESHAP AAAA (New AAAA - post 9/28/2021)

NESHAP AAAA

- Contains Revisions to other NSPS Rules

EG Cf Revisions

- Once a site begins compliance with EG Cf they cannot return to earlier provisions

NSPS Subpart
WWW Revisions

- An affected MSW landfill must continue to comply with this subpart until it:
 - Becomes subject to the more stringent requirements in an approved and effective state or federal plan that implements subpart Cf of this part, or
 - Modified or reconstructs after July 17, 2014, and thus becomes subject to subpart XXX of this part.

NSPS Subpart XXX
Revisions

- Once a site begins compliance with NSPS Subpart XXX they cannot return to earlier provisions

So, what does that look like for my site?

My landfill was subject to NSPS Subpart WWW...

The Federal Plan applies to all existing landfills (not covered by a State Plan) that have accepted waste on or after November 8, 1987 that have **NOT** commenced construction on a modification/expansion or are **NOT** newly constructed **after July 17, 2014**.

- Your site is likely a **Legacy Controlled Landfill**
- Begin compliance with Federal Plan on **6/21/2021**
- Continue complying with the NESHAP Subpart AAAA (including the new changes effective 9/28/2021)
- Review Title V Permit to make sure correct rules are cited
- If the state gets an approved State Plan implementing the EG Cf, then the site must begin following that State Plan

My landfill is already NSPS Subpart XXX...

The Federal Plan does **not** affect:

- Sites subject to **NSPS Subpart XXX** sites
 - Continue complying with NSPS Subpart XXX
 - If the site is over 50 Mg NMOC, it must also follow NESHAP Subpart AAAA (including the new changes effective 9/28/2021)
 - If the site is over 34 Mg NMOC, but still under 50 Mg, it should continue Tier 2 Sampling until it triggers 50 Mg and then NESHAP AAAA (including the new changes effective 9/28/2021) would apply as well

My state has an approved State Plan for EG Cf...

The new Federal Plan does **not** affect:

- Sites in states with **State Plans**
 - You follow your State Plan for EG Cf.
 - If your site is over 50 Mg NMOC, it must also follow NESHAP Subpart AAAA (including the new changes effective 9/28/2021)
 - If the site is over 34 Mg NMOC, but still under 50 Mg, it should continue Tier 2 Sampling until it triggers 50 Mg
 - Once NMOC is > 50 Mg, then NESHAP AAAA (including the new changes effective 9/28/2021) would apply as well
 - Review Title V Permit to make sure correct rules are cited

My landfill is under 34 Mg NMOC...

- This site will eventually be subject to the Federal Plan
- Submit Initial Design Capacity Report and Initial NMOC Report by 9/29/2021
- Continue Tier 2 Sampling and Reporting until NMOC is over 34 Mg at which time the site will begin compliance with the Federal Plan starting with the **Increments of Progress**
- Once NMOC is over 50 Mg, then NESHAP AAAA (including the new changes effective 9/28/2021) also applies
- If site commences construction, reconstruction, or modification, then it will be Subject to NSPS Subpart XXX
- Review Title V Permit to make sure correct rules are cited

My landfill is over 34 Mg NMOC...

- This site is subject to the Federal Plan on 6/21/2021
- Submit Initial Design Capacity Report and Initial NMOC Report by 9/29/2021
- Continue Tier 2 Sampling and Reporting until NMOC is over 50 Mg
- Once NMOC is over 50 Mg, then NESHAP AAAA (including the new changes effective 9/28/2021) also applies
- If site commences construction, reconstruction, or modification, then it will be Subject to NSPS Subpart XXX
- Review Title V Permit to make sure correct rules are cited

My landfill is closed...

The new Federal Plan does **not** affect:

- Very **Old Closed Landfills** (before November 8, 1987)

The Federal Plan **does include** a subcategory for **Closed Landfills**

- Must have closed on or before September 17, 2017
 - Must have filed required closure report
 - Closed Landfill Subcategory NMOC threshold stays at 50 Mg
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- Follow Closed Landfill subcategory requirements in Federal Plan
 - Review Title V Permit to make sure correct rules are cited

Questions?

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