SMACKED BY THE MACT: Landfills and North Carolina Air Toxics presented to NSWMA March 2005

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State-wide NOVs

NC DAQ (Division of Air Quality) has issued Notices of Violation (NOVs) in early March of 2005 to all Title V MSW Landfills under its jurisdiction, claiming:

- Non-compliance with Toxic Air Pollutant Guidelines contained in NCAC 2D.1104
Landfill Air Regulations - NSPS

- NSPS (New Source Performance Standards) for MSW Landfills, 40 CFR Part 66-Subparts Cc and WWW, promulgated March 12, 1996 requires control of landfill gas when the landfill capacity exceeds:
  - 2.5 million m³ AND
  - 2.5 million megagrams AND
  - NMOC emissions exceed 50 megagrams/yr
Landfill Air Regulations - MACT

- MSW Landfill MACT (Maximum Achievable Control Technology), 40 CFR Part 63-Subpart A applies to those NSPS regulated landfills requiring control (NMOC emissions 50 Mg/yr or more), and requires:
  - Immediate control of landfill gas from bioreactors
  - Startup, Shutdown, & Malfunction (SSM) Plan
  - Semiannual Reporting
  - Continuous monitoring of control device operating parameters
Both the NSPS and the MACT are federal rules.

NC rules must be AT LEAST AS stringent as federal rules.

Rule has been in effect since May 1, 1990, with several amendments and revisions.

2D.1104 is a STATE-ENFORCEABLE ONLY rule.
Nuts and Bolts of 2D.1104

- 2D.1104 requires 2-tiered demonstration of compliance with Toxic Air Pollutant (TAP) guidelines
  - Tier 1: If emissions exceed Toxic Pollutant Emission Rates (TPERs, lb/yr, day, hr) in 2Q.0711, then
    - Demonstrate highest TAP concentration at or beyond property line is below Ambient Air Levels (AALs, m³/mg) in 2D.1104
“Last MACT” Triggered 2D.1104

- “Last MACT”: 2Q.0705 sets the deadline for compliance with 2D.1104 when the source is “required to comply with the last MACT or GACT”
- The last MACT that affects landfills is MSW Landfill MACT, 40 CFR Part 63-Subpart AAAA
  - Existing sources (commenced construction on/before November 7, 2000) MACT compliance deadline was January 16, 2004
  - New sources must comply when operations begin

REMEMBER: DEADLINE MAY BE DEFERRED IF NMOC EMISSIONS ARE < 50 Mg/yr
Compliance Food Chain

- Landfills are responsible for compliance with all regulations to which they are subject.
- Landfills and consultants work together to stay abreast and comply with applicable rules.
- Consultants in turn work closely with the State regulators and depend on them to keep them up to date with current rules.
Where is the Missing Link?

- Landfills and their consultants have been in close contact with NC DAQ regarding the Landfill MACT since before it was proposed in 2000
- NC DAQ issued the “MACT Hammer” notice requiring landfills and other sources with proposed MACTs to notify the State
- The MACT was finalized January 2003
- NC DAQ provided guidance when requested on compliance with the MACT, which reiterated the federal requirements
- Compliance with 2D.1104 was not addressed
Title V permits are designed to encapsulate all of source’s applicable air requirements into one document.

Permits issued as recently as September 2004 include NO MENTION of 2D.1104, 21 MONTHS FOLLOWING THE MACT PUBLISH DATE.

Permits currently in public review now address 2D.1104.
Landfills may have received vague or unclear guidance from regulators.

Documented correspondence may be interpreted to imply that landfill gas is exempt from compliance with air toxics compliance under NC DAQ’s policy regarding “unadulterated fuels”.

Air rules (2Q.0705(c)) further cloud the issue: “...unadulterated fuel combustion sources [shall demonstrate compliance] after receiving written notification from the Director...”

What does it all mean???
Attempt to Clear the Air

- The “Last MACT” scheduled to be implemented was the “Boiler MACT”, finalized September 2004.
- NC DAQ took this opportunity to begin communicating the requirements of 2D.1104 to the regulated community.
- Landfills that either believed they were exempt from air toxics, or unaware of the requirements, contacted NC DAQ for guidance.
NC DAQ responded by stating that:

- There was no good protocol for landfills to use to demonstrate compliance.
- Workshop was being prepared to address these issues.
- NC DAQ will perform any modeling required for the landfills.
- DAQ scheduled a workshop to educate landfills on applicable air rules.
- Unfortunately, the workshop invitations were sent out attached to the NOVs.
Where Do We Go From Here

- What can individual landfills do?
  - Are you really covered?
    Previous Tier 2 NMOC testing may defer the MACT
  - What are your TPERs?
    Previously submitted emission inventories or permit applications may demonstrate compliance with 2Q.0711, & therefore 2D.1104
  - Perform modeling if TPERs are exceeded:
    TAPs < than 2D.1104 AALs should be included in the NOV response
Let’s Work Together

- A unified response to the NOV can be coordinated through industry groups including NSWMA and SWANA.
- NSWMA can address a letter that summarizes industry’s stance on the NOVs and requests a meeting between NCDENR and affected facilities.
- Industry should meet with DAQ to air grievances and help them understand that this is “not just an NOV”.
- This meeting should occur before the scheduled March 31 compliance workshop. Otherwise, the NOVs will likely dominate the agenda.
Possible Solutions

- One or more of the following outcomes are hoped to take place:
  - Across the board rescission of the NOVs
  - Written record of DAQ’s poor handling of the situation to be documented in the air files with the NOV
  - Improved communication between DAQ and the regulated community
  - Liaison between DAQ and Solid Waste Management division to provide another outlet for information on rules that affect landfills