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***Part 363: Solid Waste Disposal Facilities -  
Odor, Public Health and LFG Safety Revisions***

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# **Changes to NY Landfill Regs**

- ***Existing Landfill Regs***
  - ◆ ***6 NYCRR Part 360***
- ***Proposed Landfill Regs***
  - ◆ ***6 NYCRR Part 363***



# **Improvements to Regs**

- ***Not a Major Revision – New Regs***
- ***Getting Input from Different Sectors***
- ***Operating Landfills with Respect to Neighbors***
- ***Odor Discussed Regularly***



# **More on Odor**

- ***Odor an Increasing Neighborhood Concern***
- ***Clearer Limits Better for***
  - ◆ ***Neighbors***
  - ◆ ***Regulators***
  - ◆ ***Landfill Operators***



# ***This Talk Discusses***

## **■ *Changes Related to:***

- ◆ *Odor***

- ◆ *Public Health***

- ◆ *LFG Safety Revisions***



# Odor 101 - FIDO

- ***F*** *Frequency – Number of Events*
- ***I*** *Intensity – Strength of Odor*
- ***D*** *Duration – Length of Events*
- ***O*** *Offensiveness - Individual's Reaction*

***F***  
***I***  
***D***  
***O***



# **Why is Odor So Important?**

- ***Creates Human Odor Conditioning***
- ***People Become Sensitized, i.e. Repeated Exposure Enables People to Recognize an Odor at a LOWER Level***



# **Part 363 Odor Requirements:**

- ***Engineering Report***
- ***O&M Manual***
- ***Operation Requirements***
- ***Annual Report***



# **Engineering Report**

- ***Comprehensive Description of LFG Recovery Or Odor Control System***
  - ◆ ***Public Health Concerns***
  - ◆ ***Welfare Concerns***
  - ◆ ***Consider Specific Areas Tolerance for Odor, Dust & Noise***



# **O&M Manual - Proactive Odor Approach**

- ***Air Quality Monitoring Plan***
  - ◆ ***Screening for Fugitive LFG Emissions***
  - ◆ ***LFG Analyzed for Sulfur compounds***
  - ◆ ***Gas Collection to Control Odors / Reduce Public Health & Safety Concerns***



# **O&M Manual - Proactive Odor Approach**

- ***Comprehensive Odor Control Plan***
  - ◆ ***Daily Procedures to Establish Odor Baseline***
  - ◆ ***Work to Maintain Baseline***
  - ◆ ***Monitor Odor / Air Emissions***
  - ◆ ***Active Gas Collection System***



# **Operation Requirements**

- ***Landfill Gas Control***
  - ◆ ***Avoid Public Health & Welfare Concerns***
  - ◆ ***Control Conc. Of Methane & Explosive Gases***
  - ◆ ***Control H<sub>2</sub>S levels for 1-hr & 24-hr Periods***
- ***Ongoing Gas Monitoring Program***



# **Annual Report**

- ***Summary of LFG Collection & Control Info***
  - ◆ ***Quantity of LFG Recovered***
  - ◆ ***LFG Composition***
  - ◆ ***Odorant Fractions***
  - ◆ ***Summary of “LFG Sampling Data”***



# **Room for Improvement?**

- ***Further Separate Purposes***
  - ◆ ***Well Gas Placement for Odor***
  - ◆ ***Well Gas Placement for LFG Migration Concerns***



# **Room for Improvement?**

- ***Minimal Screening / Monitoring Requirements Could be Better Defined***



# *Room for Improvement?*

- *Numerical Limits Make it Easy for Everyone*
  - ◆ *Frequency – Number of Events*
  - ◆ *Intensity – Strength of Odor*
  - ◆ *Duration – Length of Events*
  - ◆ *Offensiveness - Individual's Reaction*



# **Room for Improvement?**

- ***LFG Sampling Data as it Refers to Odor Should be Well Defined***
- ***Reference to Numerical H<sub>2</sub>S Limits TBD; Should Consider***
  - ◆ ***Odor (D/T)***
  - ◆ ***Public Health (NYS Health Guidelines)***
  - ◆ ***Safety (OSHA)***



# **Summary**

- ***New Regs to Meet Today's Needs***
- ***Increasing Emphasis on Odor***
  - ◆ ***Odor Concerns of Increasing Importance as Dictated by Public***
  - ◆ ***Proactive Approach Assures that Reasonable & Proper Odor Control is Required***



# **Summary**

- ***Well Defined Limits Better for ALL!!***
  - ◆ ***Neighbors***
  - ◆ ***Regulators***
  - ◆ ***Landfill Operators***





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***Thank You!***

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