Satisfying NSPS/EG Requirements to Cap and Remove a GCCS

2013 LMOP

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Definitions

• We have a lot of acronyms!
• GCCS
• NSPS/EG
• NMOC
• LFGTE
• Title V
Objectives

- NSPS general cap and remove requirements
- Capturing landfill gas is a benefit
- Breakdown the costs
- State/Federal requirements
- LFGTE/beneficial use - considerations
EG/NSPS Baselines

• If your landfill was “captured”…

• General Timeframe
  – June 1996 – Emission rate report
  – June 1997 – GCCS plan
  – December 1999 – Install GCCS
  – June 2000 – First control device test
EG/NSPS Baselines

• GCCS may be removed (3 criteria):
  • “Closed Landfill”
  • GCCS operation > 15 years; and
  • Testing demonstrates…
    – Calculated NMOC < 50 megagrams/year
    – validated by three successive test dates
      • 270 to 540 day process
EG/NSPS Baselines

• 2015!!!
• 15 years is right around the corner!!!
• Some EG landfills may have already met 15 years
  – If collection and control system “met” the requirements
• Organize and execute a plan
Benefits

- Reduces/prevents air pollutants
- Reduces/prevents odors
- Prevents sub-surface migration
- Enhances final cover stability
- Reduces GHG/CO$_2$e
- Revenue source/savings
  - LFGTE/LFGT Biogas
  - Carbon credits
Benefits

• Conventional Wisdom…

“Capturing Landfill gas is the right thing to do.”
Costs

- GCCS Routine operation and maintenance
- GCCS Non-routine operation and maintenance
- Utility (electricity)
- OTHER
- >$50,000 /yr
Costs

• Title V - Permit compliance
  – Compliance monitoring, recordkeeping and reporting
  – Routine stack tests?
  – TV renewal apps/updates
  – Consultant charges for other related services

• >$25,000/yr
Costs

• NSPS/EG compliance requirements
  – Monthly wellhead monitoring
  – Surface emission scan requirements
  – Reporting/exceedance corrective measures
  – Calibration of monitoring equipment
  – Etc.

• >$25,000/yr
Costs

• GHG reporting rule requirements
  – Weekly monitoring of methane conc
  – Calibration of monitoring equipment
  – Etc.

• >$15,000/yr

• Reporting likely to remain a requirement
Incentive

• Full cap and removal of GCCS
  – Stop O and M
  – No Title V
  – No NSPS
  – Limited GHG

• Savings > $115,000/yr

• But…

• Remember those benefits!!!!
Incentive

- Remove COMPLIANCE requirements only
  - Reduced O and M
  - No Title V
  - No NSPS
  - Limited GHG
- Save > $60,000/yr
- Fewer compliance obligations…
- Priceless!
How do we do it?

• Cap and Remove Report
  – Closure report
  – Copy of the initial performance test report showing > 15 years of control
  – Copies of THREE successive NMOC emission rate reports

• More information???
Slips Trips and Falls

- Documentation, Documentation
- Was “closure” properly documented
- When was the initial performance test conducted
- Initial performance test properly conducted
- Compliance history
Planning to Succeed

- Documentation, Documentation
- Review compliance history internally
  - Identify low points and be prepared
- Create a notification and testing plan
- Seek approval/concurrence
- Communicate ENTIRE plan
  - TV permit revocation
  - Actual GCCS removal?
Planning to Succeed

• The Regulatory authority will…
  – Need “educated”
  – Be skeptical
  – Be reluctant

• Many communications may be necessary
Future Regulation Changes

• A lot of questions…

• NSPS WWW is currently in the process of revision/update
  – Be involved and focus on CLOSED facilities
  – How will the revisions effect them?
  – Will capping and removing be harder?

• GHG Rules/requirements

• Other regulations
Reminder - Beneficial Use

- There are many options available
- More are being developed
- Check with the vendors at the show
- Long term capture and control remains a good plan
Review

• Capture benefits can be increased with application of new technology
• Compliance costs can be reduced without capping and removal
• A clear/communicated plan = Success
• Watch for upcoming rule changes
Questions?
Thank you!!!!

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