

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/CO₂e
- 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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