United States Environmental Protection Agency

Proposed Rulemaking for Emission Guidelines (EG) for Municipal Solid Waste (MSW) Landfills

E.O. 13132 Federalism Consultation Meeting

April 15, 2015

Purpose & Agenda

- Purpose:
  - To provide an update of potential changes under consideration for the Emission Guidelines for MSW Landfills
- Agenda:
  - Federalism overview
  - Introduction to MSW landfills
  - Overview of the review
  - Additional changes under consideration
  - Approaches considered
  - Impacts of potential options
  - Next steps

E.O. 13132, Federalism

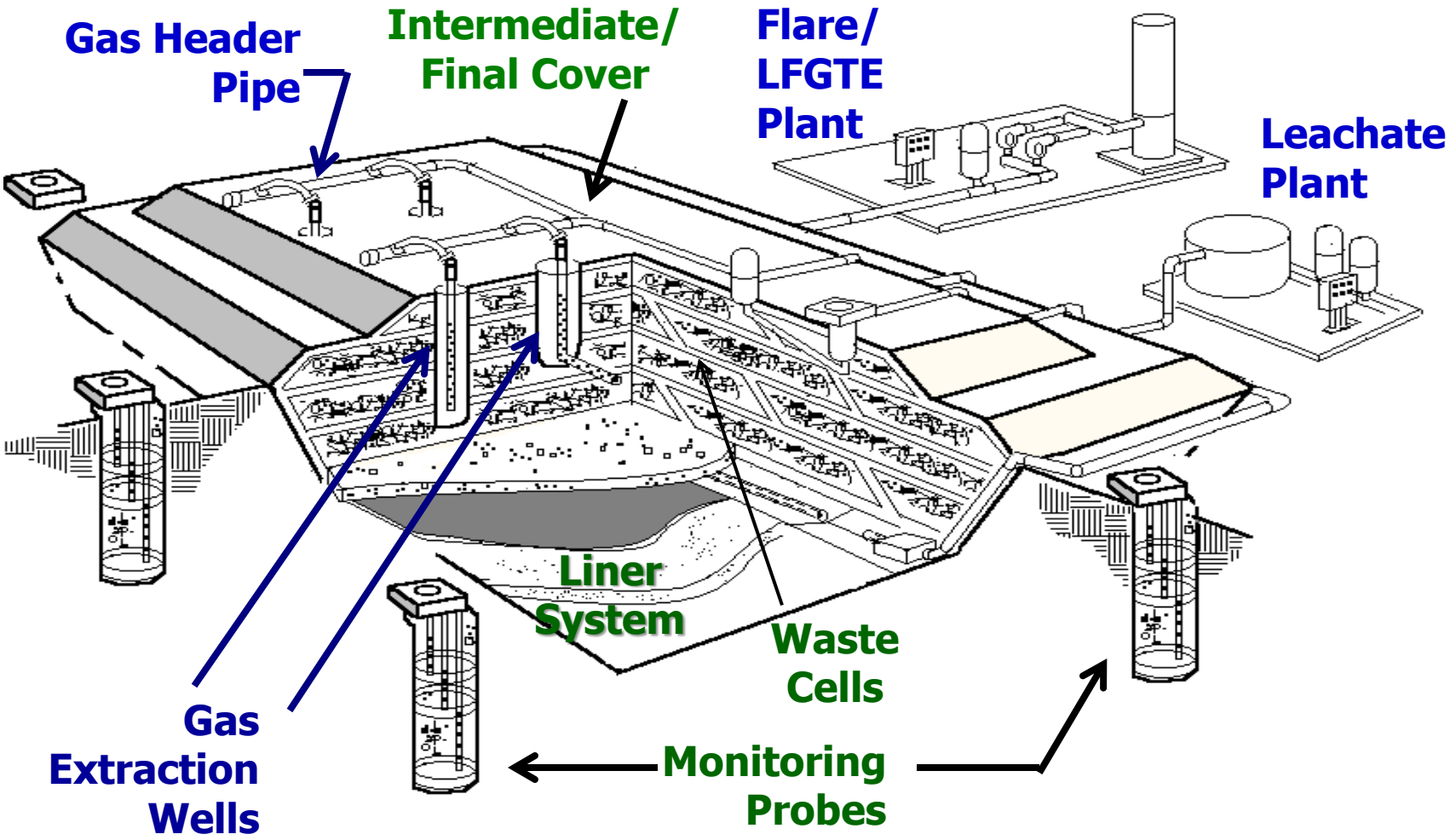
- Executive Order 13132 requires that Federal agencies consult with elected state and local government officials, or their representative national organizations, when developing regulations that have *Federalism Implications.*
- EPA's policy for implementing the Order defines regulations with *Federalism Implications* as those which:
  - (1) preempt state or local law
  - (2)(a) have state and/or local compliance costs of $25 million or more, nationally, in any one year
  - (2)(b) have small government impacts likely to equal or exceed 1% of their annual revenues in any year.
- This action falls in the later category, (2)(a), as it may have national intergovernmental compliance costs of $25 million or more in any one year
- Big 10 representatives were first briefed on the New Source Performance Standards (NSPS) and Emissions Guidelines (EGs) for MSW Landfills on September 10, 2013. As you are aware, the development schedules for these two actions were separate: a proposal (NPRM) for revised NSPS was published on July 17, 2014; and, an Advanced Notice of Proposed Rulemaking (ANPRM) for EGs published the same day.[1] Both actions underwent 60 days of public comment. We anticipate issuing a NPRM for the EGs for MSW landfills in the Summer of 2015. It has been more than a year since you were briefed on possible revisions to the EG. We are providing you with this update so you can begin developing your comments for the EG NPRM.

[1] EPA issues an Advanced Notice of Proposed Rule or ANPRM when it is considering a rulemaking and wishes to obtain additional information. When EPA proposes an action it develops a notice of proposed rule or NPRM.

What are MSW landfills?

- An MSW landfill is an entire disposal facility in a contiguous geographical space where household waste is placed in or on land
  - Landfills may also receive RCRA subtitle D waste (e.g., commercial solid waste, non-hazardous sludge, conditionally exempt small quantity generator waste, and industrial waste)
- The pollutant of concern is MSW landfill emissions
  - Commonly referred to as landfill gas
  - Generated by the decomposition of organic waste
- Landfill gas composition
  - 50% methane,
  - 50% carbon dioxide
  - trace amounts of nonmethane organic compounds (NMOC)

Modern MSW Landfill



How big is the MSW landfill industry?

- Over 1,128 active landfills in the United States
- 700 landfills are currently subject to either the NSPS or EG
- Ownership of MSW landfills may be public or private
- Over the next 5 years, 14 new landfills are predicted and 133 may modify and become new for regulatory purposes

What are Emission Guidelines?

- Emission Guidelines (EG) are established for existing sources under CAA section 111(d)
- Provide guidance for regulating landfill gas emissions which the States are required to implement through individual State plans
- State plans must generally be as stringent as the EG, but states have the flexibility to apply less stringent limits or compliance schedules on a case-by-case basis
- Current Emission Guidelines (40 CFR Subpart Cc) apply to existing landfills that accepted waste on or after November 8, 1987 and commenced construction or modification before May 30, 1991.
  - Proposed revisions to EG (Notice of Proposed Rulemaking or NPRM) will apply to existing landfills that accepted waste on or after November 8, 1987 and commenced construction or modification on or before July 17, 2014

Why reevaluate the Emission Guidelines?

- EPA proposed revisions to the NSPS on July 17, 2014 and published an announcement of proposed rulemaking for the EG on the same date. Comments were received on both actions during the comment period.
- EPA has decided that it is appropriate to propose revisions to the EG.
- Data collected from several sources for the EG review
  - EPA's Landfill Methane Outreach Program (LMOP) Landfill and Landfill Gas Energy Project Database
  - Greenhouse Gas Reporting Program (GHGRP)
- Data indicated a need to evaluate and account for changes that have occurred in the landfill industry since the NSPS and EG were originally promulgated in 1996
    - Size and number of landfills
    - Proliferation of landfill gas to energy projects
    - Gas control methods and technologies
- Final data set includes:
  - 1,839 existing landfills
  - 14 predicted future landfills
  - 133 possible modifications that would become new for regulatory purposes

Advanced Notice of Proposed Rulemaking for EG

- Purpose was to obtain public input on methods to reduce emissions from MSW Landfills; Based upon that input EPA plans to issue a NPRM to propose revisions to the EG to achieve additional emission reductions at existing MSW Landfills
- In the ANPRM, EPA requested comment on:
  - Size and emission thresholds
  - Timing of installation and expansion and removal of gas collection and control system
  - Alternative emission threshold determinations
  - Enhanced surface monitoring
  - Wellhead operating standards and corrective action
  - Treatment
  - Introduced consideration of best management practices
  - Outlined Next Generation Compliance concepts

Current Rule Requirements

Parameter	Value
Size Threshold (Applicability)	2.5 million megagrams (Mg) (mass) and 2.5 million cubic meters (volume)
Trigger for Installing Controls	50 Mg/yr non-methane organic compounds (NMOC)
Timing for Installing Controls	30 months
Control Requirements	Open flare, enclosed combustion device or treatment for beneficial use
Monitoring	Monthly gas extraction well monitoring, quarterly surface monitoring

Regulatory Proposal Options Under Consideration

Size Threshold (Applicability)	Trigger for Installing Controls*
Option 1 2.5 million megagrams (mass) and 2.5 million cubic meters (volume)	40 Mg/yr NMOC
Option 2 2.5 million megagrams (mass) and 2.5 million cubic meters (volume)	34 Mg/yr NMOC
Option 3 2.0 million megagrams (mass) and 2.0 million cubic meters (volume)	34 Mg/yr NMOC

* July 2014 NSPS Proposal (2.5 million Mg/m^3 threshold with 40 Mg/yr NMOC trigger proposed; requested comment on 34 Mg/yr NMOC trigger.)

Annualized Costs and Emission Reductions for the EG Options – in year 2025

				Emission Reductions (Mg)	
Option	**Ownership Category**	**Landfills Affected[1]**	**Annualized Net Cost[2] (2012$)**	**NMOC**	**CH_4**
Option 1 2.5 million Mg; Reduce to 40 Mg/yr NMOC	Small Entity	10	3,110,000	220	34,900
	Not Small Entity	82	44,632,000	2,280	359,500
	All Entities	92	47,743,000	2,500	394,400
Option 2 2.5 million Mg; Reduce to 34 Mg/yr NMOC	Small Entity	19	9,155,000	450	70,600
	Not Small Entity	126	68,086,000	3,580	564,500
	All Entities	145	77,241,000	4,030	635,100
Option 3 2.0 million Mg; Reduce to 34 Mg/yr NMOC	Small Entity	22	10,290,000	500	78,800
	Not Small Entity	141	72,889,000	3,860	608,300
	All Entities	163	83,179,000	4,360	687,100

[1]These are landfills that are subject to any type of incremental control costs beyond the baseline in 2025.
Option 3 could require 101 additional landfills required to report, by reducing the design capacity threshold.
[2] Costs have been annualized assuming a 7% discount rate and estimates have been independently rounded. The annualized net cost is the difference between the average annualized revenue and the sum of annualized control cost and the annualized testing and monitoring costs.

Alternative Emission Threshold Determinations

- Approach 1: Continue to rely on a series of models to make threshold determinations to determine when to install required gas collection and control systems
  - Models may offer less subjective threshold determination and are not as directly affected by factors that may affect surface emissions monitoring (SEM) such as weather factors (e.g., wind speed and precipitation), and equipment calibration and user operation
- Approach 2: Create a new Tier 4 option that will allow site-specific measurements to determine when to install and/or remove required gas collection systems
  - Gas collection system installation would be required upon exceedance of the Tier 4 test
  - Benefits of approach:
    - Provides flexibility in annual emission threshold reporting
    - Ensures environmental protection by basing control requirements on site-specific surface data
    - Consistent with California Landfill Methane Rule
    - Corrective action not allowed
    - Tighter threshold will likely drive the use of best management practices
  - Add site-specific surface emissions monitoring (SEM) demonstration as component of gas collection and control system removal
  - Advocated by industry and Small entity representatives with trigger of 500 ppm; also advocated by NGOs but with lower thresholds (enhanced SEM and 200 ppm trigger); Some states contend there is no practical way to review and verify Tier 4 demonstration

In the forthcoming NPRM, EPA intends to seek input from government entities on methods to verify and validate Tier 4 demonstrations and who should qualify for Tier 4.

Enhanced Surface Monitoring*

- Approach 1: Retain current approach
  - Traverse at 30 meters (98 ft)
  - Monitor during typical meteorological conditions
- Approach 2: Propose elements of enhanced surface monitoring
  - Tighten traverse from 30 meters (98 ft) to 25 ft
  - Integrated reading of 25 ppm over 50,000 sq ft grids
  - No monitoring when wind speed exceeds 10 mph instantaneous or 5 mph average
  - Some industry stakeholders asserted that SEM would not achieve additional reductions and involves greater costs
  - Some states agreed with enhanced surface monitoring while others suggests an offsetting traverse pattern for the current approach
  - NGOs support enhanced surface monitoring, but suggest perhaps that it be done twice per year instead of quarterly

*Cost estimates are provided on next slide

In the forthcoming NPRM, EPA intends to seek data on the efficacy of enhanced surface monitoring from the government entities.

Costs Associated with Enhanced Surface Monitoring

Comparison of Baseline Surface Monitoring Versus Enhanced Surface Monitoring in 2025 (2012$)

Control option	Surface monitoring type	Number of landfills controlling	Annual Cost	Incremental Cost	Total Cost per controlled landfill	Incremental cost per controlled landfill
Baseline	No change (30 meter traverse)	565	6,260,000	NA	11,100	NA
	Enhanced (25-foot traverse, integrated sample)		46,625,000	40,365,000	82,500	71,400
Option 2.5/40	No change (30 meter traverse)	647	6,867,000	607,000	10,600	1,100
	Enhanced (25-foot traverse, integrated sample)		50,968,000	44,708,000	78,800	69,100
Option 2.5/34	No change (30 meter traverse)	709	7,380,000	1,120,000	10,400	1,700
	Enhanced (25-foot traverse, integrated sample)		54,706,000	48,446,000	77,200	68,300

Adjusting Wellhead Operating Standards

- Approach 1: Retain current approach of monitoring, recording and reporting wellhead temperature and oxygen/nitrogen
  - Take corrective action for exceedances
  - Report exceedances in annual reports
- Approach 2: Remove the operational standards for wellhead temperature and oxygen/nitrogen
  - Continue to monitor and keep records of these parameters to inform operation of the gas collection and control system (GCCS)
  - No corrective action or reporting of exceedances
  - Benefits of approach
    - Enables collection of additional landfill gas (early collection, horizontal collectors, collect from leachate removal system)
    - Reduces requests for higher operating values and burden on regulatory authority and affected landfill
  - Some state comments were received about safety concerns associated with removing the standards; while other states support removal or reduced frequency of monitoring

In the forthcoming NPRM, EPA intends to seek information from the government entities on paperwork related to the current wellhead operating standards relative to any data on how often exceedance of these standards results in an expansion of a GCCS, identification of a fire, or other types of GCCS adjustments.

Landfill Gas Treatment

- Approach 1*: Adopt non-numeric requirements (filter, dewater, and compress) for landfill gas treatment and require creation of a site-specific monitoring plan
  - Approach is consistent with feedback from affected landfills, state agencies and SERs that expressed concern with meeting numeric requirements for chiller-based systems, which they say can be expensive
  - Monitoring plan would ensure environmental protection and accommodate site-specific and end-use specific treatment requirements
- Approach 2*: Adopt numeric requirements for landfill gas treatment
  - 10 micron filtration, dew point reduction to at least 45° F, compression of gas
  - Continuous monitoring: pressure drop across filter, temperature for chiller-based dewatering system, dew point for non chiller-based systems
  - Feedback indicated treatment is site and end-use specific.
  - Numeric approach would require equipment such as chillers with associated costs.**

*Approaches 1 and 2 above represent new emission guidelines provisions

**Industry commenters estimate the capital cost of chillers are approximately $500,000 with added capital costs of $100,000 to $150,000 for instrumentation, continuous monitoring and controls. Chiller maintenance and monitoring costs are projected to be at least $60,000 per year per project. Finally operations costs are expected to run between $30,000 and $60,000 annually.

In the forthcoming NPRM, EPA intends to seek information regarding how non-numeric definition could be enforceable and the impacts of having to meet numeric requirements.

Best Management Practices

- Approach 1*: Encourage GCCS best management practices (BMPs) and organics diversion in the rule framework, but do not mandate
  - Acknowledge that the use of GCCS BMPs and alternative oxidative controls can achieve reductions while recognizing site-specific factors
  - Acknowledge existing state/local organics diversion programs
  - Highlight benefits of delayed compliance for landfills diverting waste (e.g., longer period to trigger emission threshold)
  - Incorporate BMPs into voluntary program outreach by offering technical assistance
  - Highlight flexible monitoring and reporting mechanisms to encourage more widespread adoption of GCCS BMPs and diversion (Tier 4 and wellhead flexibility)
  - Consider approaches to incentivize BMPs and organics diversion and explore flexible monitoring, recordkeeping and reporting requirements for landfills using BMPs and organics diversion
- Approach 2*: Mandate organics diversion
  - Alternative thresholds for landfills diverting waste
    - Infrastructure not currently in place to handle organic waste
    - Need to develop mechanisms to compute diversion rate to ensure a source would qualify for a compliance alternative
  - Alternative modeling inputs for waste diversion
    - Many sites lack capacity to track degradable waste; potentially labor/cost intensive
  - Industry does not agree with mandating organics diversion; not efficient under CAA; federal, state and local waste officials will actually handle organics diversion
  - NGOs advocate and assert this approach is demonstrated, extremely effective and cost effective

*Approaches 1 and 2 above represent new emission guidelines provisions

In the forthcoming NPRM, EPA intends to seek information on effective methods of incentivizing organics diversion and other BMPs.

Information from the Government Entities

- Proposed changes to the emission guidelines will be based on EPA's evaluation of the Best System of Emission Reductions and the more and better data EPA has, the more effective that evaluation will be.
- In any future notice of proposed rulemaking, EPA intends to seek information and data on the following:
  - Input on methods to verify and validate Tier 4 demonstrations and who should qualify for Tier 4
  - Data on the efficacy of enhanced surface monitoring
  - Information on paperwork related to the current wellhead operating standards relative to any data on how often exceedance of these standards result in an expansion of a gas collection and control system, identification of a fire, or adjustments to the GCCS
  - Information regarding how non-numeric landfill gas treatment could be enforceable and the impacts of having to meet numeric requirements
  - Information on effective methods of incentivizing organics diversion and other best management practices

What are the next steps?

- EPA anticipates publication of the NPRM during summer 2015
- Do you have any additional information or any other approaches that the EPA should consider?
  - If so, please provide information to EPA as soon as possible
- Please send written comments to: Chappell.Linda@epa.gov and copy Hanson.Andrew@epa.gov

Questions?

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  - (202)564-3664
  - Hanson.Andrew@epa.gov

Appendix A

State and Local Governments Potentially Subject to Regulation

Acadia Parish Policy Jury, LA	Augusta-Richmond Georgia, GA	Blue Earth County Environmental Services, MN	Burlington County, NJ
Ada County, ID	Baldwin County Solid Waste, AL	Boone County, IA	Butler County, KS
Adams County SWMD, IN	Baltimore County Government, MD	Bountiful City, UT	Calhoun County Commission, AL
Alamance County, NC	Bannock County, ID	Bradley County, TN	Campbell County, WY
Allen County, KS	Bartholomew County Solid Waste Management District, IN	Brevard County Board of Commissioners, FL	Canyon County, ID
Androscoggin Valley Regional Disposal District, NH	Barton County, KS	Broome County Division of Solid Waste Management, NY	Cape May County Municipal Utilities Authority, NJ
Angelina County, TX	Bartow County Government, GA	Broward County Solid Waste and Recycling Services, FL	Carroll County Solid Waste Management Commission, IA
Anne Arundel County, MD	Berkeley County Water and Sanitation, SC	Brown County Port & Resource Recovery Department, WI	Carroll County, MD
Athens-Clarke County Unified Government, GA	Black Hawk County Landfill, IA	Brown County, SD	Carroll Grayson Galax Solid Waste Authority, VA
Atlantic County Utilities Authority, NJ	Black Warrior Solid Waste Disposal Authority, AL	Buncombe County Solid Waste Services, NC	Catawba County, NC

State and Local Governments Potentially Subject to Regulation

Cecil County Board of Commissioners, MD	City of Albemarle, NC	City of Bristol, VA	City of Columbia, MO
Cedar Rapids Linn County, IA	City of Albuquerque, EHD, NM	City of Brownsville, TX	City of Conway, AR
Charles County Department of Public Facilities, MD	City of Amarillo, TX	City of Brownwood, TX	City of Corpus Christi, TX
Charleston County Government, SC	City of Ann Arbor, MI	City of Burbank, CA	City of Corsicana, TX
Charlotte County, FL	City of Arlington, TX	City of Canton Sanitary Landfill, MS	City of Dallas, TX
Chautauqua County, NY	City of Atlanta , GA	City of Carson City, NV	City of Decatur and Morgan County, AL
Cherokee County, SC	City of Auburn, NY	City of Casper, WY	City of Denton, TX
Chester County Solid Waste Authority, PA	City of Austin, TX	City of Chandler, AZ	City of Dothan, AL
Citrus County Board of County Commission, FL	City of Baton Rouge/Parish of East Baton Rouge, LA	City of Chattanooga, TN	City of Durham NC
City and County of Honolulu, HI	City of Beaumont, TX	City of Cheyenne, WY	City of Dyersburg, TN
City of Alamogordo, NM	City of Birmingham, AL	City of Clovis, NM	City of Edinburg Solid Waste Department, TX
City of Albany, NY	City of Bowling Green, KY	City of Colorado City, TX	City of El Paso, TX

State and Local Governments Potentially Subject to Regulation

City of Elko, NV	City of Grand Island, NE	City of Janesville, WI	City of Louisville, MS
City of Fargo, ND	City of Grand Prairie, TX	City of LaGrange, GA	City of Loveland, CO
City of Farmers Branch, TX	City of Greensboro, NC	City of Laredo, TX	City of Lubbock, TX
City of Flagstaff, AZ	City of Greenville, SC	City of Lawton, OK	City of Macon, GA
City of Fort Worth, TX	City of Hastings, NE	City of Lebanon, NH	City of Maryville, TN
City of Ft. Smith, AR	City of High Point, NC	City of Lee's Summit, MO	City of Middletown, OH
City of Gardner, MA	City of Hopkinsville, KY	City of Lincoln, NE	City of Midland, MI
City of Garland, TX	City of Huachuca, AZ	City of Little Rock, AR	City of Midland, TX
City of Gary, IN	City of Iowa City, IA	City of Logan, UT	City of Montgomery, AL
City of Glendale, AZ	City of Irving, TX	City of Lompoc, CA	City of Morris, IL
City of Gloversville, NY	City of Jacksonville, FL	City of Longmont, CO	City of Mountain View, CA
City of Grand Forks, ND	City of Jacksonville, TX	City of Los Angeles, CA	City of Mt Pleasant, TX

State and Local Governments Potentially Subject to Regulation

City of Nacogdoches, TX	City of Phoenix, AZ	City of San Antonio, TX	City of Sunnyvale, CA
City of Nashua, Department of Public Works, NH	City of Pierre, SD	City of San Diego, CA	City of Sweetwater, TX
City of New Haven, CT	City of Ponca City, OK	City of Santa Clara, CA	City of Tacoma, WA
City of New Orleans, LA	City of Port Arthur, TX	City of Santa Cruz, CA	City of Thomasville, GA
City of New York Department of Sanitation (DSNY), NY	City of Raleigh, NC	City of Santa Maria, CA	City of Toledo, OH
City of Newport News, VA	City of Rapid City, SD	City of Savannah Sanitation Bureau, GA	City of Tucson, AZ
City of Newton, IA	City of Redlands Municipal Utilities Department, CA	City of Shreveport, LA	City of Tyler, TX
City of Northampton, MA	City of Richland, WA	City of Sioux Falls, SD	City of Victoria, TX
City of Owensboro, KY	City of Riverview, MI	City of Snyder, TX	City of Virginia Beach, VA
City of Palo Alto, CA	City of Sacramento, CA	City of Springfield Department of Public Works, MA	City of Waco, TX
City of Pampa, TX	City of Salina, KS	City of St. Joseph, MO	City of Walla Walla, WA
City of Paso Robles, CA	City of San Angelo, TX	City of Staunton, VA	City of Watertown, SD

State and Local Governments Potentially Subject to Regulation

City of Whittier, CA	Coastal Regional Solid Waste Management Authority, NC	County of Maui, HI	County of Stanislaus, CA
City of Wichita Falls, TX	Coffee County Commission, AL	County of Orange, NY	County of Wayne, NC
City of Wichita, KS	Columbus Consolidated Government, GA	County of Orange, OC Waste & Recycling, CA	County of Whiteside, IL
City of Winston-Salem, NC	Connecticut Resources Recovery Authority, CT	County of Orange, VA	Cowlitz County, WA
City of Xenia, OH	Conty of Franklin Solid Waste Mangement Authority, NY	County of Riverside, CA	Craighead County Solid Waste Disposal Authority, AR
Clark County Board of Commissioners, IN	County of Butte, CA	County of Sacramento, CA	Crawford County Board of Commissioners, OH
Clark County, NV	County of Dane Putlic Works Solid Waste Division, WI	County of San Bernardino Solid Waste Management Division, CA	Crisp County Board of Commissioners, GA
Clayton County Board of Commissioners, GA	County of Fresno, CA	County of San Joaquin, CA	Crittenden County, AR
Cleveland County Health Department, NC	County of Greenville, SC	County of Santa Cruz, Department of Public Works, CA	Crook County Government, OR
Clinton County Area Solid Waste Agency, IA	County of Los Angeles Sanitation Dist. 2, CA	County of Shasta, CA	Cumberland County Improvement Authority, NJ
Clinton County Solid Waste Authority, PA	County of Lycoming, PA	County of Sonoma, CA	Cumberland County Solid Waste Management, NC

State and Local Governments Potentially Subject to Regulation

Dalton-Whitfield Regional Solid Waste Management Authority, GA	DeSoto Parish Police Jury, LA	Enid, OK	Frederick County Department of Public Works, VA
Davidson County Integrated Solid Waste Management Dept., NC	Development Authority of the North Country, NY	Erie County Board of Commissioners, OH	Fulton County Department of Solid Waste, NY
Daviess County Fiscal Court, KY	Dougherty County Board of Commissioners, GA	Escambia County Board of County Commissioners, FL	Gallatin County Solid Waste Management District, MT
Decatur County, TN	Douglas County Public Works, OR	Fairbanks North Star Borough, AK	Gaston County Government, NC
Defiance County, Board of Commissioners, OH	Douglas County, NE	Fairfax County Government, VA	Georgetown County, SC
DeKalb County Public Works Department of Sanitation Division, GA	Dubuque Metropolitan Area Solid Waste Agency, IA	Fauquier County, VA	Gloucester County Improvement Authority (GCIA), NJ
Delaware County Solid Waste Authority, PA	Eagle County Government, CO	Flathead County Solid Waste, MT	Golden Triangle Regional Solid Waste Management Authority, MS
Delaware Solid Waste Authority, DE	East Central Solid Waste Commission, MN	Ford County, KS	Gordon County, GA
Des Moines County Regional Solid Waste Commission, IA	Edison Township, NJ	Fort Bend County, TX	Great River Regional Waste Authority, IA
Deschutes County Oregon, OR	Elkhart County Landfill, IN	Frederick County Board of County Commissioners, MD	Greater Lebanon Refuse Authority, PA

State and Local Governments Potentially Subject to Regulation

Greater New Bedford Regional Refuse Management District, MA	Highlands County, FL	Jefferson Parish Government, LA	Lake County Board of County Commissioners, FL
Greenbrier County Solid Waste Authority, WV	Hillsborough County, FL	Johnston County Department of Public Utilities, NC	Lake County Dept of Utility, OH
Greenwood County, SC	Horry County Solid Waste Authority, SC	Joint Solid Waste Disposal Board, City and County of Peoria, IL	Lamar County Regional Solid Waste Authority, GA
Haleyville Solid Waste Disposal Authority, AL	Houston County Board of Commissioners, GA	Kenai Peninsula Borough, AK	Lancaster County Solid Waste Management Authority, PA
Hall County, GA	Howard County, MD	Kent County Department of Public Works, MI	Landfill of North Iowa, IA
Hancock County Landfill, OH	Indian River County, FL	Kern County Waste Management Department, CA	Lane County, OR
Hardin County Fiscal Court, KY	Indiana Department of Environmental Management (IDEM), IN	King County Solid Waste Division, WA	Lee County Board of County Commissioners, FL
Harford County Government, MD	Iredell County, NC	Knox County Landfill, IL	Leflore County Municipal Solid Waste Landfill, MS
Haywood County, NC	Islip Resource Recovery Agency, NY	Kootenai County, ID	Lenoir County, NC
Henrico County Department of Public Works, VA	Jefferson County, AL	La Crosse County, WI	Leon County, FL
Hernando County, FL	Jefferson Parish Davis Landfill, LA	La Paz County, AZ	Lewis & Clark County, MT

State and Local Governments Potentially Subject to Regulation

Lexington County Public Works Department, SC	Marion County Board of County Commissioners, FL	Merced County Regional Waste Management, CA	Monterey Regional Waste Management District, CA
Lexington-Fayette Urban County Government (LFUCG), KY	Marquette County Solid Waste Management Authority, MI	Mercer County Solid Waste Authority, WV	Montgomery County Division of Solid Waste Services, MD
Los Angeles County Sanitation Districts, CA	Martin County Board of County Commissioners, FL	Mesa County, CO	Montgomery County Government, TN
Loudon County Solid Waste Disposal Commission, TN	Maryland Environmental Service, MD	Metro, OR	Morrison County, MN
Loudoun County Department of General Services, Division of Waste Management, VA	Mason County Fiscal Court, KY	Metropolitan Government of Nashville and Davidson County, TN	Municipality of Anchorage - Solid Waste Services, AK
Madison County Dept. of Solid Waste & Sanitation, NY	Mass Air National Guard, MA	Miami Dade Public Works and Waste Management Department, FL	Municipality of Arecibo, PR
Manatee County Government, FL	Matanuska-Susitna Borough, AK	Middlesex County Utilities Authority, NJ	Municipality of Cabo Rojo, PR
Marathon County Solid Waste Department, WI	Mayor and City Council of Baltimore, MD	Minnesota Pollution Control Agency, MN	Municipality of Carolina, PR
Maricopa County Solid Waste, AZ	McDowell County, WV Solid Waste Authority, WV	Mississippi County, AR	Municipality of Fajardo, PR
Marion County, TN	Mecklenburg County, NC	Monmouth County Board of Chosen Freeholders, NJ	Municipality of Guaynabo, PR

State and Local Governments Potentially Subject to Regulation

Municipality of Juncos, PR	Nassau County Board of County Commissioners, FL	Northern Tier Solid Waste Authority, PA	Outagamie County, WI
Municipality of Ponce, PR	New Bedford, Department of Public Works, MA	Northwest Iowa Area Solid Waste Agency, IA	Page County, VA
Municipality of Salinas, PR	New Hanover County, NC	Ohio County Fiscal Court, KY	Payette County, ID
Municipality of San Juan, PR	New Jersey Meadowlands Commission, NJ	Okaloosa County Public Works, FL	Pike County Fiscal Court, KY
Municipality of Toa Alta, PR	New River Resource Authority, VA	Oklahoma Environmental Management Authority, OK	Pima County, AZ
Municipality of Toa Baja, PR	New River Solid Waste Assoc, FL	Oneida-Herkimer Solid Waste Management Authority, NY	Pinellas County Board of County Commissioners, FL
Municipality of Vega Baja, PR	North Central Iowa Regional Solid Waste Agency, IA	Onslow County, NC	Pitkin County, CO
Murray County, GA	North Texas Municipal Water District, TX	Orange County, NC	Pitt County, NC
Muscatine County Solid Waste Management Agency, IA	Northeast Arkansas Solid Waste District, AR	Orange County Utilities - Solid Waste Division, FL	Polk County Board of Commissioners, GA
Muskegon County Department of Public Works, MI	Northeast Mississippi Solid Waste Management Authority, MS	Oswego County, NY	Polk County Board of County Commissioners, FL
Napa Vallejo Waste Management Authority, CA	Northeast Nebraska Solid Waste Coalition, NE	Ottumwa-Wapello Solid Waste Commission, IA	Polk County, TX

State and Local Governments Potentially Subject to Regulation

Pollution Control Financing Authority, NJ	Roanoke Valley Resource Authority (RVRA), VA	Sampson County, NC	Seminole County Board of County Commissioners, FL
Preble County Board of Commissioners, OH	Robeson County, NC	San Diego County Department of Public Works, CA	Seward County, KS
Prince George's County Government, Department of Environmental Resources, Waste Management Division, MD	Rockingham County, NC	San Joaquin County, CA	Shelby County Commission (Local Government), AL
Prince William County, Public Works Department, Solid Waste Division, VA	Rockingham County, VA	Sandoval County, NM	Shelby County, TN
Putnam County BOCC, FL	Rome-Floyd County Solid Waste Commission, GA	Santa Barbara County, Department of Public Works, Resource Recovery & Waste Management, CA	Shenandoah County, VA
Raleigh County Solid Waste Authority, WV	Rowan County, NC	Santa Fe Solid Waste Management Agency, NM	Shoals Solid Waste Disposal Authority, AL
Reno County, KS	Salem County Improvement Authority, NJ	Santa Rosa Board of County Commissioners, FL	Snohomish County, WA
Rhea County, TN	Salinas Valley Solid Waste Authority, CA	Sarasota County, FL	Solid Waste Authority of Central Ohio, OH
Rice County, MN	Salt Lake County, UT	Sarpy County, NE	Solid Waste Authority of Palm Beach County, FL
Richmond Sanitary District, IN	Salt River Pima Maricopa Indian Community, AZ	SECCRA Community Landfill, PA	Solid Waste Disposal Authority, AL

State and Local Governments Potentially Subject to Regulation

Solid Waste Division, City of Billings, MT	St. Landry Parish Waste Disposal District, LA	Surry County, NC	Town of Colonie, NY
Solid Waste Management Authority of Atkinson County, GA	St. Lucie County Commissioners, FL	Sussex County MUA, NJ	Town of Hempstead, NY
South Central Iowa Solid Waste Agency, IA	St. Mary Parish Government, LA	Tangipahoa Parish Government, LA	Town of Huntington, NY
South Central Solid Waste Authority, NM	St. Mary's County, MD	Tazewell County Board of Supervisors, VA	Town of Manchester, CT
South Utah Valley Solid Waste District, UT	Stafford County, VA	Tehama County/City of Red Bluff Landfill Agency, CA	Town of North Hempstead, NY
Southeast Berrien County Landfill Authority, MI	State of Minnesota, MN	Texoma Area Solid Waste Authority, TX	Town of Palmer, MA
Southeastern Public Service Authority, VA	State of Utah Division of Wildlife Resources, UT	Three Rivers Solid Waste Authority, SC	Town of Riverhead, NY
Southern Idaho Regional Solid Waste District, ID	Steuben County Department of Public Works, NY	Three Rivers Solid Waste Management Authority, MS	Town of Smithtown, NY
Spartanburg County, SC	Sullivan County, NY	Town of Babylon, NY	Town of Windsor, CT
Springfield, MO	Summit County, CO	Town of Bourne, MA	Trans-Jordan Cities, UT
St. Clair County, MI	Summit County, UT	Town of Brookhaven, NY	Tucker County Solid Waste Authority, WV

State and Local Governments Potentially Subject to Regulation

Tulare County Solid Waste Department, CA	Weber County, UT
Uintah County, Vernal City, UT	Webster Parish Police Jury, LA
Ventura County, CA	Western Placer Waste Management Authority, CA
Ventura Regional Sanitation District, CA	Wexford County Landfill, MI
Virgin Islands Waste Management Authority, VI	Wicomico County, MD
Volusia County Board of County Commissioners, FL	Winnebago County Solid Waste Management Board, WI
Wake County Government, NC	Worcester County Department of Public Works, MD
Wasatch Integrated Waste Management District, UT	Yakima County Public Services - Solid Waste Division, WA
Washington County, MD	Yolo County, CA
Washington County, UT	York County Solid Waste Authority, PA
Washington Parish Government, LA	York County, SC
Waste Commission of Scott County, IA	