Commonwealth of Pennsylvania



Request for Delegation of Authority to Implement and Enforce the Federal Plan Requirements for Sewage Sludge Incineration Units Constructed On or Before October 14, 2010 (81 FR 26040; April 29, 2016)

August 2016

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I. Background

Section 129 of the Clean Air Act (CAA) requires the U.S. Environmental Protection Agency (EPA) to develop and adopt standards for solid waste incineration units pursuant to Sections 111 and 129 of the CAA. On March 21, 2011, the EPA promulgated New Source Performance Standards (NSPS) for "new" Sewage Sludge Incineration (SSI) units and Emission Guidelines (EGs) for "existing" SSI units located at wastewater treatment facilities designed to treat domestic sewage sludge which are codified in 40 CFR Part 60, Subparts LLLL and MMMM, respectively. Sections 111(b) and 129(a) of the CAA address emissions from new units (i.e., NSPS), and CAA sections 111(d) and 129(b) address emissions from existing units (i.e., EGs). The NSPS are federal regulations directly enforceable upon SSI units, and, under CAA section 129(f)(1), become effective 6 months after promulgation.

Unlike the NSPS, the EGs provide direction for developing state plans; however, the EGs are not themselves directly enforceable. The EGs are implemented under an EPA-approved state or tribal plan or EPA-adopted federal plan that implements and enforces them once the state, tribal, or federal plan has become effective.

Section 129(b)(2) of the CAA directs states with existing SSI unit(s) subject to the EGs to submit plans to the EPA that implement and enforce the EGs. The deadline for states to submit state plans to the EPA for review was March 21, 2012. Sections 111 and 129(b)(3) of the CAA and 40 CFR 60.27(c) and (d) require the EPA to develop, implement and enforce a federal plan for SSI units in any state without an approvable state plan within 2 years after promulgation of the EGs. This action finalizes the SSI federal plan.

The Pennsylvania Department of Environmental Protection (DEP or Department) has adequate resources and legal authority to implement the Federal SSI Plan. 40 CFR Part 60, Subparts LLLL and MMMM requirements are adopted in their entirety and incorporated in the *Pennsylvania Code* at Section 122.3 (relating to adoption of standards). To this end, the DEP will request that EPA delegate authority to the Department to implement and enforce the Federal SSI Plan codified at 40 CFR Part 62, Subpart LLL.

II. Inventory of Sources

The following SSI units in Pennsylvania (excluding units located in Allegheny and Philadelphia Counties) are subject to the Federal SSI Plan:

- 1. DELAWARE CNTY REG WA/DELCORA WESTERN REG TRMT PLT Chester / Delaware County
- 2. ERIE SEWER AUTHORITY/ERIE WWTP Erie / Erie County
- 3. WYOMING VALLEY SANI AUTH Wilkes Barre / Luzerne County

- 4. HATFIELD TWP MUNI AUTH/COLMAR Colmar / Montgomery County
- 5. UPPER MORELAND HATBORO JT SEW AUTH/WILLOW GROVE Willow Grove / Montgomery County
- 6. E NORRITON PLYMOUTH /NORRISTOWN Plymouth meeting / Montgomery County

III. Demonstration of Adequate Resources

The Department has adequate resources and authority to administer the Federal SSI Plan requirements codified in 40 CFR Part 60, Subparts LLLL and MMMM.

DEP will be the implementing agency and its Air Quality Program will be assigned to implement and enforce the requirements of 40 CFR Part 62, Subpart LLL in the affected counties in the Commonwealth except Allegheny and Philadelphia counties. There are 265 employees in the Air Quality Program, including program managers, administrators, chemical engineers, civil engineers, electrical engineers, chemists, technicians, inspectors, and clerical staff. Within the Air Quality Program, there are approximately 158 employees headquartered in DEP's regional offices with work duties that include permitting, inspection and compliance and enforcement. Personnel experience is an integration of permitting, toxicology, and hazards analysis. This experience also includes process auditing, personnel training, field inspections, analytical techniques, environmental monitoring, data analysis, and asbestos remediation.

IV. Legal Authority to Implement the Federal Plan [40 CFR §60.26]

Pursuant to 40 CFR §60.26(a), DEP must demonstrate that it has the legal authority to implement and enforce the plan. The demonstration of legal authority must demonstrate that the Commonwealth is authorized to (a) adopt emission standards and compliance schedules applicable to designated facilities; (b) enforce applicable laws, regulations, standards, and compliance schedules, and seek injunctive relief; (c) obtain information necessary to determine whether designated facilities are in compliance with applicable laws, regulations, standards and compliance schedules, including authority to require recordkeeping and to make inspections and conduct tests of designated facilities; (d) require owners or operators of designated facilities to install, maintain, and use emission monitoring devices and to make periodic reports to the State on the nature and amounts of emissions from such facilities; and (e) make such data available to the public as reported and as correlated with applicable emission standards.

On December 27, 1997, DEP amended 25 *Pa. Code* §122.3 (relating to adoption of standards) to adopt in their entirety and incorporate by reference the federal Emission Guidelines promulgated in 40 CFR Part 60 by the EPA Administrator (27 *Pa.B.* 6809). Therefore, the EGs which are codified at 25 *Pa. Code* §122.3 will serve as the legal mechanism to implement the Emission Guidelines. The amendments to §122.3 were duly promulgated under applicable state law including the Air Pollution Control Act (35 P. S. §4001 *et seq.*), Commonwealth Documents

Law (45 P.S. §1102 et seq.), Commonwealth Attorneys Act (71 P.S. §§745.1-745.15), and the Regulatory Review Act (71 P.S. §745.1 et seq.).

Additionally, the Air Pollution Control Act provides DEP with adequate legal authority to (a) adopt emission standards and compliance schedules applicable to designated facilities; (b) enforce applicable laws, regulations, standards, and compliance schedules and seek injunctive relief; (c) obtain information necessary to determine whether designated facilities are in compliance with applicable laws, regulations, standards and compliance schedules, including authority to require recordkeeping and to make inspections and conduct tests of designated facilities; (d) require owners or operators of designated facilities to install, maintain, and use emission monitoring devices and to make periodic reports to the State on the nature and amounts of emissions from such facilities; and (e) make such data available to the public as reported and as correlated with applicable emission standards. *See generally* 35 P.S. § 4004.

Copies of Pennsylvania's Air Pollution Control Act and applicable regulations in 25 *Pa. Code*, Subpart C, Article III are enclosed as Appendix A, in accordance with 40 CFR §60.26(b) requirements.

Inventory of Sources - 40 CFR §60.25(a)

List of Existing Sewage Sludge Incineration Units in Pennsylvania Subject to Emission Guidelines 40 CFR Part 60, Subpart MMMM

Permit No.	Facility Name	Region	Existing Control Devices	Compliance	
23-00038	DELCORA Delaware County Reg WA Treatment Plant	Southeast	Southeast Venturi and Impingement Scrubber		
25-00179	Erie City Sewer Authority	Northwest	Venturi and Impingement Scrubber	Unknown	
40-00067	Wyoming Valley Sani Authority	Northeast	Venturi and Impingement Scrubber	Unknown	
46-00175	Hatfield Twp Muni Authority	Southeast	Venturi and Impingement Scrubber	Unknown	
46-00221	Upper Moreland Hat Boro Joint Sewer Authority	Southeast	Venturi and Impingement Scrubber	Unknown	
46-00230	East Norriton, Plymouth Whitpain Joint Sewer Authority	Southeast	Venturi Scrubber	Unknown	

Summary of Stack Test Reports of SSI Units in Pennsylvania (Excluding Allegheny and Philadelphia Counties) Subject to Amended Emission Guidelines

Permit	Facility	Year Stack Test Conducted	Particulate Matter mg/dscm @ 7% O ₂	Carbon Monoxide ppmvd @ 7% O ₂	Hydrogen Chloride ppmvd @ 7% O ₂	Lead mg/dscm @ 7% O ₂	Cadmium mg/dscm @ 7% O ₂	Mercury mg/dscm @ 7% O ₂	Nitrogen Oxides ppmvd @ 7% O ₂	Sulfur Dioxide ppmvd @ 7% O ₂	Dioxins / Furans ng/dscm @ 7% O ₂
	DELCORA Delaware County Reg WA Treatment Plant	2012	29.3	2.3-nat. gas 10.4-No. 2 fuel oil	0.11	0.074	0.041	0.034-M29 0.104- ASTM OH	148-nat. gas 98.3-No. 2 fuel oil	60.7- nat. gas 76.4-No. 2 fuel oil	3.36E-04
		2012	29.7	3.5-nat.gas 0.7-No. 2 fuel oil	0.58	0.116	0.038	0.049-M29 0.095- ASTM OH	122-nat. gas on 10/22/12 78.2 - nat . gas on 10/24/12 101-No. 2 fuel oil	106-nat. gas on 10/22/12 64.0- nat. gas on 10/24/12 95.3-No. 2 fuel oil	1.13E-04
25-00179	Erie City Sewer Authority	<u>2016</u> (Unit 1)	0.009	134.6	0.32	6.00E-05	1.50E-04	8.00E-05	130.8	6.1	1.83E-04
		2016 (Unit 2)	0.008	113.7	0.41	6.00E-05	7.00E-05	7.00E-05	87.8	7.2	2.45E-03
40-00067	Wyoming Valley Sani Authority	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
46-00175	Hatfield Twp Muni Authority	2016	1.38	26.1	0.94	7.68E-04	1.43E-03	0.1031	105.6	7.3	0.0044
46-00221	Upper Moreland Hat Boro Joint Sewer Authority	2015	30.15	102.67	<1.32	2.47E-02	1.01E-02	<3.80E-02	99.91	13.04	4.82E-01 ⁺ 4.54E-01 ^{\$}
46-00230	East Norriton, Plymouth Whitpain Joint Sewer Authority	2015 (Test 1 w/o Caustic)	25.8	8.04	3.45#	3.54E-02	8.44E-03	7.82E-02	53.7	31.0#	0.014
		2015 Test 2, Condition 1 – w/o Caustic	N/A	N/A	5.48*	N/A	N/A	N/A	N/A	24.7*	N/A
		2015 Test 2, Condition 2 – w Caustic	N/A	N/A	5.85 [@]	N/A	N/A	N/A	N/A	23.7 [@]	N/A

Note: ⁺Total PCDD/F as 2,3,7,8 TCDD – Toxic Equivalents, I89 Factors

\$Total PCDD/F as 2,3,7,8 TCDD – Toxic Equivalents, 2005 WHO Factors

*Test 1 was performed without caustic injection.

*Test 2 was performed under Condition 1 or without caustic injection

All but the DELCORA test data have not been validated.

[®] Test 2 was performed under Condition 2 or with caustic injection

Compliance Schedules – 40 CFR §62.15875

Except as provided in paragraph (b) of this section, the owner or operator of affected facilities are required to achieve final compliance specified by the date in paragraph (a) of this section: (a) March 21, 2016, as specified in Table 1 of this subpart.

Owners or operators of each designated SSI listed in 40 CFR §60.25(a) – Inventory of Sources of this addendum must comply with the emission limitations according to the compliance schedule prescribed in 40 CFR § 62.15875. DEP will follow the dates and requirements in the Federal Plan, including 40 CFR § 62.15875. The owners or operators of designated SSI facilities subject to 40 CFR § 62 Subpart LLL shall comply with all the Subpart LLL requirements regardless of whether a designed facility is identified in the source inventory required by 40 CFR §60.25(a).

Certification of Hearing – 40 CFR §60.23

A public hearing will be held by DEP in accordance with the requirements of 40 CFR §60.23. The notice of the public comment period and hearing will be published in the *Pennsylvania Bulletin* on July 30, 2016. The hearing will be held on August 31, 2016, from 10:00 a.m. – 12:00 p.m. in the Rachel Carson State Office Building, 12th Floor Conference Room, 400 Market Street, Harrisburg, PA 17105. The public comment period will close on September 2, 2016. A copy of the *Pennsylvania Bulletin* notice of the public hearing will be attached as Appendix B.

Any comments received during the public comment period or at the public hearing will be addressed in a Comment and Response Document, which will be provided as Appendix C.

Memorandum of Agreement

The DEP commits to enter into a Memorandum of Agreement with the EPA Regional Administrator who sets forth the terms, conditions and effective date of the delegation and that serves as the mechanism for the transfer of authority, in accordance with 40 CFR §60.5045.