Commonwealth of Pennsylvania



Request for Delegation of Authority of the Federal Hospital/Medical/Infectious Waste Incinerators Plan

NOVEMBER 2014

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I. Background

Section 129 of the Clean Air Act (CAA) requires the U.S. Environmental Protection Agency (EPA) to establish performance standards for hospital/medical/infectious waste incinerators (HMIWI) pursuant to Section 111 of the CAA. On September 15, 1997, the EPA promulgated New Source Performance Standards (NSPS) for "new" HMIWI units and Emission Guidelines (EGs) for "existing" HMIWI units. On October 6, 2009, and April 4, 2011, the EPA promulgated updated NSPS and EGs for HMIWI units. Under Section 129 of the CAA, states must submit to the EPA a Plan to implement and enforce the requirements of the EGs. The EGs, promulgated under Section 111 (d) of the CAA, establish criteria for state and local agencies to develop control strategies for "existing" HMIWI units.

The "Federal Plan Requirements for Hospital/Medical/Infectious Waste Incinerators Constructed On or Before December 1, 2008," found at 40 CFR Part 62, Subpart HHH was promulgated on May 13, 2013. 78 FR 28066. After review of the Federal Plan, the Pennsylvania Department of Environmental Protection (DEP) is requesting delegation of authority to implement and enforce the Federal HMIWI Plan codified at 40 CFR Part 62, Subpart HHH.

II. Inventory of Sources

The HMIWI source category is divided into small, medium and large subcategories based on the maximum design waste burning capacity of the HMIWI, expressed in pounds per hour. An HMIWI is considered "small" if the burn capacity is less than or equal to 200 pounds per hour. Any HMIWI with a maximum design burning capacity greater than 200 pounds per hour but less than or equal to 500 pounds per hour is categorized as a "medium" HMIWI. The "large" subcategory for HMIWI is based on a maximum design waste burning capacity of more than 500 pounds per hour.

The following HMIWI units in Pennsylvania (excluding Allegheny and Philadelphia Counties) are subject to the rule:

- 1. Holy Spirit Hospital Camp Hill / Cumberland County
- 2. Hamot Medical Center Erie / Erie County
- 3. Riddle Memorial Hospital Media / Delaware County
- 4. Pennsylvania State University, Animal Diagnostic Lab Incinerator State College / Centre County
- 5. Merck & Company, Inc., Waste Heat Incinerator Upper Gwynedd / Montgomery County
- 6. Merck & Company, Inc., Rotary Kiln Incinerator Upper Gwynedd / Montgomery County

III. Demonstration of Adequate Resources

The following paragraph demonstrates that DEP has adequate resources to administer the program as required by 68 FR 57531 (October 3, 2003).

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 HHH. There are 261 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 154 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, compliance schedules and seek injunctive relief; (c) obtain information necessary to determine whether designated facilities are in compliance with applicable laws and 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. §8745.1-745.15), and the Regulatory Review Act (71 P.S. §745.1 *et seq.*).

Additionally, the Air Pollution Control Act provides DEP with adequate legal authority (b) enforce applicable laws, regulations, standards, compliance schedules and seek injunctive relief; (c) obtain information necessary to determine whether designated facilities are in compliance with applicable laws and 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 included in this submittal in accordance with 40 CFR §60.26(b).

Inventory of Sources - 40 CFR §60.25(a)

Inventory of Large HMIWI in Pennsylvania (Excluding Allegheny and Philadelphia Counties) Subject to Amended Emission Guidelines

No.	Permit No.	Facility Name	City/County	Capacity	
1.	TV 25-00688	Hamot Medical Center	Erie/Erie	1060 lb/hr	
2.	TV 46-00005	Merck and Company, Inc. Unit 2	Upper Gwynedd/ Montgomery	1950 lb/hr	
3.	TV 46-00005	Merck and Company, Inc. Unit 5	Upper Gwynedd/ Montgomery	3045 lbs/hr	

Note: Large HMIWI means an HMIWI whose maximum design waste burning capacity is more than 500 pounds per hour; or a continuous or intermittent HMIWI whose maximum charge rate is more than 500 pounds per hour; or a batch HMIWI whose maximum charge rate is more than 4000 pounds per day.

Inventory of Medium HMIWI in Pennsylvania (Excluding Allegheny and Philadelphia Counties) Subject to Amended Emission Guidelines

No.	Permit No.	Facility Name	City/County	Capacity	
1.	TV 21-05038	Holy Spirit Hospital	Camp Hill/Cumberland	500 lb/hr	
2.	TV 14-00003	Pennsylvania State University	State College/Centre	500 lb/hr	
3.	TV 23-00051	Riddle Memorial Hospital	Media/Delaware	480 lb/hr	

Note: Medium HMIWI means an HMIWI whose maximum design waste burning capacity is more than 200 pounds per hour but less than or equal to 500 pounds per hour; a continuous or intermittent HMIWI whose maximum charge rate is more than 200 pounds per hour but less than or equal to 500 pounds per hour; or a batch HMIWI whose maximum charge rate is more than 1600 pounds per day but less than or equal to 4000 pounds per day.

In Pennsylvania (excluding Allegheny and Philadelphia Counties), there are no small HMIWI units. Small HMIWI means an HMIWI whose maximum design waste burning capacity is less than or equal to 200 pounds per hour; or a continuous or intermittent HMIWI whose maximum charge rate is less than or equal to 200 pounds per hour; or a batch HMIWI whose maximum charge rate is less than or equal to 1,600 pounds per day.

Summary of Stack Test Reports of Large HMIWI in Pennsylvania (excluding Allegheny and Philadelphia Counties) Subject to Amended Emission Guidelines

Permit No.	Facility Name	Year Stack Test Conducted									
			Particulate Matter	Carbon Monoxide	Hydrogen Chloride	Lead	Cadmium	Mercury	Nitrogen Oxides	Sulfur Dioxide	Dioxins / Furans
TV 25-00688	Hamot Medical Center, Erie	February 2009	0.0011 gr/dscf	6.5 ppmv	12.67 ppmv	0.00116 gr/10 ³ dscf	0.000337 gr/10 ³ dscf	0.00087 gr/10 ³ dscf	127.9 ppmv	0.0 ppmv	0.018 gr/10 ⁹ dscf (TEQ)
TV 46-00005	Merck and Company, Inc., Upper Gwynedd	March 2006	0.0072 gr/dscf	0.0 ppmv	0.57 ppmv	0.0006 gr/10 ³ dscf	0.00003 gr/10 ³ dscf	0.00041 gr/10 ³ dscf	90 ppmv	0.33 ppmv	0.051 ng/dsm (TEQ), 3.862 ng/dsm (Total)
TV 46-00005	Merck and Company, Inc., Upper Gwynedd	April 2006	0.0087 gr/dscf	0.1 ppmv	7.9 ppmv	0.0005 gr/10 ³ dscf	.0001 gr/10 ³ dscf	0.0005 gr/10 ³ dscf	81.8 ppmv	3.0 ppmv	1.073 ng/dsm (TEQ)

Summary of Stack Test Reports of Medium HMIWI in Pennsylvania (excluding Allegheny and Philadelphia Counties) Subject to Amended Emission Guidelines

Permit No.	Facility Name	Year Stack Test Conducted									
			Particulate Matter	Carbon Monoxide	Hydrogen Chloride	Lead	Cadmium	Mercury	Nitrogen Oxides	Sulfur Dioxide	Dioxins / Furans
TV 14-00003	Penn State University	April 2013 & Sept 2013	0.087 gr/dscf	0.034 ppmv	0.25 ppmv	0.0041 gr/10 ³ dscf	0.00035 gr/10 ³ dscf	0.000093 gr/10 ³ dscf	105 ppmv	0.021 ppmv	0.035 gr/10 ⁹ dscf (TEQ)
TV 21-05038	Holy Spirit Hospital	July 2011	0.0124 gr/dscf	2.2 ppmv	2.70 ppmv	Not available	Not available	0.010 mg/dscm	Not available	Not available	Not available
TV 23-00051	Riddle Memorial Hospital	June 2012	0.0137 gr/dscf	1.3 ppmv	< 2.05 ppmv	Not available	Not available	Not available	Not available	Not available	Not available

Compliance Schedules - 40 CFR §60.39e(c)

Owners or operators of each designated HMIWI 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 §60.39e. DEP will follow the dates and requirements in the Federal Plan, including 40 CFR §62.14470. The owners or operators of designated HMIWI facilities subject to Subpart Ce shall comply with all the Subpart Ce requirements regardless of whether a designed facility is identified in the source inventory required by 40 CFR §60.25(a).

Certification of Hearing

A public hearing will be held in accordance with the requirements in 40 CFR §60.23. A copy of the *Pennsylvania Bulletin* notice of the public hearing is attached in Appendix A. A listing of witnesses and their organizational affiliation and a brief summary of their statement will be found in Appendix B. [The Appendices will be available after the close of the public comment period.]

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 § 62.14401.