*West Virginia Department of Environmental Protection*
*Division of Air Quality*

*Jim Justice*
*Governor*

*Austin Caperton*
*Cabinet Secretary*

# Permit to Operate

Pursuant to

**Title V**

of the Clean Air Act

*Issued to:*

**Charleston Area Medical Center**
General Hospital
R30-03900057-2017

*William F. Durham*
*Director*

*Issued: October 2, 2017 • Effective: October 16, 2017*
*Expiration: October 2, 2022 • Renewal Application Due: April 2, 2022*

Permit Number: **R30-03900057-2017**
Permittee: **Charleston Area Medical Center**
Facility Name: **General Hospital**
Permittee Mailing Address: **3200 MacCorkle Avenue SE, Charleston, WV 25304**

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*This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.*

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| | |
|---|---|
| Facility Location: | Charleston, Kanawha County, West Virginia |
| Facility Mailing Address: | 501 Morris Street, Charleston WV |
| Telephone Number: | (304)-388-5432 |
| Type of Business Entity: | Corporation |
| Facility Description: | General Medical and Surgical Hospital |
| SIC Codes: | 8062 |
| UTM Coordinates: | 445.19 km Easting • 4244.56 km Northing • Zone 17 |

Permit Writer: Robert Mullins

*Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.*

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*Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.*

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# 1.0 Emission Units and Active R13, R14, and R19 Permits

## 1.1. Emission Units

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed | Design Capacity | Control Device |
|---|---|---|---|---|---|
| 1S | IMWI | Medical Waste Incinerator (HMIWI) | 1995 | 1,000 lb/hr | 1C & 2C |

| Control Device ID | Control Device Information |
|---|---|
| 1C | Dry-injection fabric filter (DIFF) with sodium bicarbonate and powder activated carbon (PAC) injection. |
| 2C | Monroe Environmental Corp. Model No. VPB-070<br>Packed Bed Scrubber using sodium hydroxide injection for HCl removal. |

## 1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

| Permit Number | Date of Issuance |
|---|---|
| R13-1772K | April 14, 2017 |

# 2.0 General Conditions

## 2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

## 2.2. Acronyms

| | |
|---|---|
| **CAAA** | Clean Air Act Amendments |
| **CBI** | Confidential Business Information |
| **CEM** | Continuous Emission Monitor |
| **CES** | Certified Emission Statement |
| **C.F.R. *or* CFR** | Code of Federal Regulations |
| **CO** | Carbon Monoxide |
| **C.S.R. *or* CSR** | Codes of State Rules |
| **DAQ** | Division of Air Quality |
| **DEP** | Department of Environmental Protection |
| **DIFF** | Dry-Injection Fabric Filter |
| **FOIA** | Freedom of Information Act |
| **HAP** | Hazardous Air Pollutant |
| **HMIWI** | Hospital/Medical/Infectious Waste Incinerator |
| **HON** | Hazardous Organic NESHAP |
| **HP** | Horsepower |
| **lbs/hr *or* lb/hr** | Pounds per Hour |
| **LDAR** | Leak Detection and Repair |
| **m** | Thousand |
| **MACT** | Maximum Achievable Control Technology |
| **mm** | Million |
| **mmBtu/hr** | Million British Thermal Units per Hour |
| **mmft$^3$/hr *or* mmcf/hr** | Million Cubic Feet Burned per Hour |
| **NA *or* N/A** | Not Applicable |
| **NAAQS** | National Ambient Air Quality Standards |
| **NESHAPS** | National Emissions Standards for Hazardous Air Pollutants |
| **$NO_x$** | Nitrogen Oxides |
| **NSPS** | New Source Performance Standards |
| **PM** | Particulate Matter |
| **$PM_{10}$** | Particulate Matter less than 10μm in diameter |
| **pph** | Pounds per Hour |
| **ppm** | Parts per Million |
| **PSD** | Prevention of Significant Deterioration |
| **psi** | Pounds per Square Inch |
| **SIC** | Standard Industrial Classification |
| **SIP** | State Implementation Plan |
| **$SO_2$** | Sulfur Dioxide |
| **TAP** | Toxic Air Pollutant |
| **TPY** | Tons per Year |
| **TRS** | Total Reduced Sulfur |
| **TSP** | Total Suspended Particulate |
| **USEPA** | United States Environmental Protection Agency |
| **UTM** | Universal Transverse Mercator |
| **VEE** | Visual Emissions Evaluation |
| **VOC** | Volatile Organic Compounds |

## 2.3. Permit Expiration and Renewal

2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
**[45CSR§30-5.1.b.]**

2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
**[45CSR§30-4.1.a.3.]**

2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
**[45CSR§30-6.3.b.]**

2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
**[45CSR§30-6.3.c.]**

## 2.4. Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
**[45CSR§30-5.1.f.3.]**

## 2.5. Reopening for Cause

2.5.1. This permit shall be reopened and revised under any of the following circumstances:

a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.

b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

**[45CSR§30-6.6.a.]**

## 2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
**[45CSR§30-6.4.]**

## 2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
**[45CSR§30-6.5.a.]**

## 2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
**[45CSR§30-6.5.b.]**

## 2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
**[45CSR§30-5.1.h.]**

## 2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

a. The change must meet all applicable requirements and may not violate any existing permit term or condition.

b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield.

d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

**[45CSR§30-5.9.]**

## 2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.
**[45CSR§30-5.8]**

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.
**[45CSR§30-5.8.a.]**

2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

**[45CSR§30-5.8.c.]**

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
**[45CSR§30-2.39]**

## 2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.

b. The permit shield shall extend to all terms and conditions under each such operating scenario; and

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

**[45CSR§30-5.1.i.]**

## 2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
**[45CSR§30-5.1.f.1.]**

## 2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

**[45CSR§30-5.3.b.]**

## 2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

**[45CSR§30-5.3.d.]**

## 2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.
**[45CSR§30-5.1.f.2.]**

## 2.17. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
**[45CSR§30-5.7.a.]**

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.
**[45CSR§30-5.7.b.]**

2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
**[45CSR§30-5.7.c.]**

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
**[45CSR§30-5.7.d.]**

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
**[45CSR§30-5.7.e.]**

## 2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
**[45CSR§30-5.2.a.]**

2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

## 2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.
**[45CSR§30-5.1.f.5.]**

## 2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.
**[45CSR§30-4.2.]**

## 2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.
**[45CSR§30-5.6.a.]**

2.21.2. Nothing in this permit shall alter or affect the following:

a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

**[45CSR§30-5.6.c.]**

## 2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.
**[45CSR§30-5.3.e.3.B. and 45CSR38]**

## 2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
**[45CSR§30-5.1.e.]**

## 2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.
**[45CSR§30-5.1.f.4]**

## 2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

**[45CSR§30-5.1.d.]**

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA. **[45CSR§30-5.1.a.2.]**

# 3.0 Facility-Wide Requirements

## 3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. **[45CSR§6-3.1.]**

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
**[45CSR§6-3.2.]**

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
**[40 C.F.R. §61.145(b) and 45CSR34]**

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
**[45CSR§4-3.1 State-Enforceable only.]**

3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
**[45CSR§11-5.2]**

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
**[W.Va. Code § 22-5-4(a)(14)]**

3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

**[40 C.F.R. 82, Subpart F]**

3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.
**[40 C.F.R. 68]**

## 3.2. Monitoring Requirements

3.2.1. None.

## 3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.

2. The result of the test for each permit or rule condition.

3. A statement of compliance or non-compliance with each permit or rule condition.

**[WV Code §§ 22-5-4(a)(14-15) and 45CSR13]**

## 3.4. Recordkeeping Requirements

3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

**[45CSR§30-5.1.c.2.A.]**

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.
**[45CSR§30-5.1.c.2.B.]**

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
**[45CSR§30-5.1.c. State-Enforceable only.]**

## 3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
**[45CSR§§30-4.4. *and* 5.1.c.3.D.]**

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
**[45CSR§30-5.1.c.3.E.]**

3.5.3. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by e-mail as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

**DAQ:**
Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

**US EPA:**
Associate Director
Office of Air Enforcement and Compliance Assistance (3AP20)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

**DAQ Compliance and Enforcement[1]:**
DEPAirQualityReports@wv.gov

[1]For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
**[45CSR§30-8.]**

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

**DAQ:**
DEPAirQualityReports@wv.gov

**US EPA:**
R3_APD_Permits@epa.gov

**[45CSR§30-5.3.e.]**

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4. The semi-annual monitoring reports shall be submitted in electronic format by e-mail to the following address:

**DAQ:**
DEPAirQualityReports@wv.gov

**[45CSR§30-5.1.c.3.A.]**

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

**[45CSR§30-5.1.c.3.C.]**

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.
**[45CSR§30-5.1.c.3.B.]**

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.
**[45CSR§30-4.3.h.1.B.]**

## 3.6. Compliance Plan

3.6.1. None.

## 3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

| | | |
|---|---|---|
| a. | 45CSR20 | CAMC General Hospital's HMIWI stack is less than 213 feet high, which is below the Good Engineering Practice stack Height limit in Section 2.4.a. |
| b. | 45CSR§21-40.1. | The aggregate maximum theoretical VOC emissions are less than the 100 tons per year threshold. |
| c. | 40 CFR part 60, subpart Ec | CAMC General Hospital's HMIWI was constructed before the June 20, 1996 applicability date. |
| d. | 40 CFR part 64 | CAMC General Hospital's HMIWI is subject to 45 CSR§18-7.7a which requires the owner to comply with the requirements for compliance and performance testing listed in 40 CFR §60.56c which includes continuous compliance determination methods, therefore this facility is exempt from CAM in accordance with 40 CFR §§ 64.2(b)(1)(i) and (vi). |

# 4.0 Medical Waste Incinerator Requirements [Emission Unit 1S]

## 4.1. Limitations and Standards

4.1.1. The HMIWI shall comply with the operator training and qualification requirements specified in 40 CFR §60.53c as follows:

a. No owner or operator of an affected facility shall allow the affected facility to operate at any time unless a fully trained and qualified HMIWI operator is accessible, either at the facility or available within 1 hour. The trained and qualified HMIWI operator may operate the HMIWI directly or be the direct supervisor of one or more HMIWI operators.

b. Operator training and qualification shall be obtained through a State-approved program or by completing the requirements included in Section 4.1.1.c. through g. of this permit.

c. Training shall be obtained by completing an HMIWI operator training course that includes, at a minimum, the following:

1. 24 hours of training on the following subjects:

i. Environmental concerns, including pathogen destruction and types of emissions;

ii. Basic combustion principles, including products of combustion;

iii. Operation of the type of incinerator to be used by the operator, including proper startup, waste charging, and shutdown procedures;

iv. Combustion controls and monitoring;

v. Operation of air pollution control equipment and factors affecting performance (if applicable);

vi. Methods to monitor pollutants (continuous emission monitoring systems and monitoring of HMIWI and air pollution control device operating parameters) and equipment calibration procedures (where applicable);

vii. Inspection and maintenance of the HMIWI, air pollution control devices, and continuous emission monitoring systems;

viii. Actions to correct malfunctions or conditions that may lead to malfunctions;

ix. Bottom and fly ash characteristics and handling procedures;

x. Applicable Federal, State, and local regulations;

xi. Work safety procedures;

xii. Pre-startup inspections; and

xiii. Recordkeeping requirements

2. An examination designed and administrated by the instructor.

3. Reference material distributed to the attendees covering course topics.

d. Qualifications shall be obtained by completion of a training course that satisfies the criteria under Section 4.1.1.c. of this permit; and either 6 months experience as an HMIWI operator, 6 months experience as a direct supervisor of an HMIWI operator, or completion of at least two burn cycles under the observation of two qualified HMIWI operators.

e. Qualification is valid from the date on which the examination is passed or the completion of the required experience, whichever is later.

f. To maintain qualification, the trained and qualified HMIWI operator shall complete and pass an annual review or refresher course of at least 4 hours covering, at a minimum, the following:

1. Update of regulations;

2. Incinerator operation, including startup and shutdown procedures;

3. Inspection and maintenance;

4. Responses to malfunctions or conditions that may lead to malfunction; and

5. Discussion of operation problems encountered by attendees.

g. A lapsed qualification shall be renewed by one of the following methods:

1. For a lapse of less than 3 years, the HMIWI operator shall complete and pass a standard annual refresher course described in Section 4.1.1.f. of this permit.

2. For a lapse of 3 years or more, the HMIWI operator shall complete and pass a training course with the minimum criteria described in Section 4.1.1.c. of this permit.

h. The owner or operator of an affected facility shall maintain documentation at the facility that address the following:

1. Summary of the applicable standards under 40 CFR part 60, subpart Ec;

2. Description of the basic combustion theory applicable to an HMIWI;

3. Procedures for receiving, handling, and charging waste;

4. HMIWI startup, shutdown, and malfunction procedures;

5. Procedures for maintaining proper combustion air supply levels;

6. Procedures for operating the HMIWI and associated air pollution control systems within the standards established under 40 CFR part 60, subpart Ec;

7. Procedures for responding to periodic malfunction or conditions that may lead to malfunction;

8. Procedures for monitoring HMIWI emissions;

9. Reporting and recordkeeping procedures; and

10. Procedures for handling ash.

i. The owner or operator of an affected facility shall establish a program for reviewing the information listed in Section 4.1.1.h. annually with each HMIWI operator (defined in 40 CFR § 60.51c).

1. The initial review of the information listed in Section 4.1.1.h. of this permit shall be conducted prior to assumption of responsibilities affecting operation.

2. Subsequent reviews of the information listed in Section 4.1.1.h. of this permit shall be conducted annually.

j. The information listed in Section 4.1.1.h. of this permit shall be kept in a readily accessible location for all HMIWI operators. This information, along with records of training shall be available for inspection by the EPA or its delegated enforcement agent upon request.

**[45CSR§18-7.4; 40C.F.R.§§62.12150-12152; 45CSR13 – Permit R13-1772, Condition 4.1.6]**

4.1.2. The permittee shall prepare a waste management plan. The waste management plan shall identify both the feasibility and the approach to separate certain components of solid waste from the health care waste stream in order to reduce the amount of toxic emissions from the incinerated waste. A waste management plan may include, but is not limited to, elements such as segregation and recycling of paper, cardboard, plastics, glass, batteries, food waste, and metals (e.g., aluminum cans, metals-containing devices); segregation of non-recyclable wastes (e.g., polychlorinated biphenyl-containing waste, pharmaceutical waste, and mercury-containing waste, such as dental waste); and purchasing recycled or recyclable products. A waste management plan may include different goals or approaches for different areas or departments of the facility and need not include new waste management goals for every waste stream. It should identify, where possible, reasonably available additional waste management measures, taking into account the effectiveness of waste management measures already in place, the costs of additional measures, the emission reductions expected to be achieved, and any other environmental or energy impacts they might have. The American Hospital Association publication entitled "An Ounce of Prevention: Waste Reduction Strategies for Health Care Facilities" (incorporated by reference, see 40 CFR § 60.17) shall be considered in the development of the waste management plan. The owner or operator of each commercial HMIWI company shall conduct training and education programs in waste segregation for each of the company's waste generator clients and ensure that each client prepares its own waste management plan that includes, but is not limited to, the provisions listed previously in this section.

**[45CSR§18-7.5; 40C.F.R. §§62.12150-12152; 45CSR13 – Permit R13-1772, Condition 4.1.4]**

4.1.3. Visible emissions from Emission Point IMWI shall not be greater than six (6) percent opacity on a 6-minute block average basis.

**[45CSR§18-7.3.c.2.; 40C.F.R. §§62.12150-12152; 45CSR13 – Permit R13-1772, Condition 4.1.2]**

4.1.4. Emissions of regulated air pollutants to the atmosphere from the medical waste incinerator shall not exceed the emission limitations as set forth in the following table.

Table 4.1.4. Emission Limitation for the Medical Waste Incinerator

| Pollutant | Concentration Limit | Units[1] | Averaging Time |
|---|---|---|---|
| Particulate Matter (PM) | 0.011 | grains per dscf | 3-run average (1-hour minimum sample time per run) |
| Carbon Monoxide (CO) | 11 | ppmv | 24 hour block average[2] |

| Pollutant | Concentration Limit | Units[1] | Averaging Time |
|---|---|---|---|
| Dioxins/ Furans | 4.1 | grains per $10^9$ dscf | 3-run average (4-hour minimum sample time per run) |
| Hydrogen Chloride (HCl) | 6.6 | ppmv | 3-run average (1-hour minimum sample time per run) |
| Sulfur Dioxide ($SO_2$) | 9.0 | ppmv | 3-run average (1-hour minimum sample time per run) |
| Nitrogen Oxides ($NO_x$) | 140 | ppmv | 3-run average (1-hour minimum sample time per run) |
| Lead (Pb) | 0.016 | grains per $10^3$ dscf | 3-run average (1-hour minimum sample time per run) |
| Cadmium | 0.004 | grains per $10^3$ dscf | 3-run average (1-hour minimum sample time per run) |
| Mercury (Hg) | 0.0079 | grains per $10^3$ dscf | 3-run average (1-hour minimum sample time per run) |

1 – Measured pollutant shall be corrected to 7 percent oxygen on a dry basis.
2 – HMWI units with CEMS allowed to use averaging time stated in 40 C.F.R. §60.56c(c)

**[45CSR13 - Permit R13-1772, Condition 4.1.1, 45CSR§18-7.3.a.2; Table 18-1B; 40 C.F.R. §§62.12150-12152]**

4.1.5. The Permittee shall operate and maintain the medical waste incinerator and associated control devices in accordance with the following operating parameters, which have been established based on demonstrated compliance with the emission limits in condition 4.1.4. except for CO.

a. The waste feed rate to the medical waste incinerator shall not exceed maximum charge rate of 1,000 pounds per hour on a three-hour rolling average and 1,700,000 pounds per year. A maximum of ten (10%) percent of the total annual limit may come from non-CAMC related facilities. CAMC facilities include the CAMC General Hospital, CAMC Memorial Hospital, CAMC Women's and Children's Hospital, CAMC Teays Valley Hospital, the CAMC Cancer Center and other Medical offices owned and operated by the applicant. The maximum charge rate for the purposes of demonstrating compliance with all of the emission limits in Table 4.1.4 is met if the actual charge rate does not exceed 1,029 pounds per hour on a three hour rolling average. This parameter, maximum charge rate, shall be determined at 110 percent of the lowest 3-hour average (taken at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with all of the emission limits in Table 4.1.4. **[45CSR§18-7.7.d and 40 C.F.R. §§62.12150-12152]**

b. The minimum sorbent injection rate shall not be less than 39.1 pounds per hour on a 3-hour rolling average basis. This parameter, minimum sorbent injection rate, shall be determined at 90 percent of the highest 3-hour average (taken at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the Hg and HCl emission limits. **[45CSR§18-7.7.d and 40 C.F.R. §§62.12150-12152]**

c. The maximum temperature of the exhaust gases entering the fabric filter control device shall not exceed 436.5 °F on a three hour rolling average basis. This parameter, maximum fabric filter temperature, shall be determined at 110 percent of the lowest 3-hour average (taken at a minimum, once every minute)

measured during the most recent performance test demonstrating compliance with the dioxin/furan emission limit.
**[45CSR§18-7.7.d and 40 C.F.R. §§62.12150-12152]**

d. The minimum temperature of the secondary chamber shall not fall below 1800 °F on a three hour rolling average basis. Compliance with this limit shall be satisfied by configuring the operational controls that lock out the waste charging operation unless this parameter is satisfied. The minimum secondary chamber temperature for the purposes of demonstrating compliance with the PM, dioxin/furan, and NOx limits in condition 4.1.4 is met if the temperature does not fall below 1,705.1 °F on a rolling three hour average. This parameter, minimum secondary chamber temperature, shall be determined at 110 percent of the lowest 3-hour average (taken at minimum, once every minute) measured during the most recent performance test demonstrating compliance with the PM, dioxin/furan, and NOx emission limits.
**[45CSR§18-7.7.d and 40 C.F.R. §§62.12150-12152]**

e. The minimum pH of the scrubbing liquid shall not be less than 6.71 on a three hour rolling average basis. This parameter, minimum scrubber liquor pH, shall be determined at 90 percent of the highest 3-hour rolling average (taken at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the HCl emission limit.
**[45CSR§18-7.7.d and 40 C.F.R. §§62.12150-12152]**

f. The minimum flow rate of scrubbing liquid to the packed bed scrubber shall not fall below 78.8 gallons per minute determined on a three hour rolling average basis. This parameter, minimum scrubber liquor flow rate, shall be determined at 90 percent of the highest 3-hour average (taken at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the HCl emission limit.
**[45CSR§18-7.7.d and 40 C.F.R. §§62.12150-12152]**

g. The minimum pressure drop across the packed bed scrubber shall not fall below 1.51 inches of water column basis on a three hour rolling average basis. This parameter, minimum pressure drop across the packed bed scrubber, shall be determined at 90 percent of the highest 3-hour average (taken at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the PM emission limit.
**[45CSR§18-7.7.d and 40 C.F.R. §§62.12150-12152]**

h. The supplemental fuel for the primary and secondary chambers shall be limited to natural gas.

i. The above operating parameters do not apply during performance testing.

**[45CSR13 – Permit R13-1772, Condition 4.1.3.]**

4.1.6. The medical waste incinerator shall not be charged with any hazardous waste defined in 45CSR25.
**[45CSR13 – Permit R13-1772, Condition 4.1.5]**

4.1.7. The permittee shall conduct annual inspections of the medical waste incinerator and associated control devices with subsequent inspections no more than 12 months following the previous inspection. Such inspections shall include the following:

a. Inspection of all burners, pilot assemblies, and pilot sensing devices for proper operation: cleaning of pilot flame sensor, as necessary;

b. Ensuring proper adjustment of primary and secondary chamber combustion air, and adjust as necessary;

c. Inspection of hinges and door latches and lubrication as necessary;

d. Inspection of dampers, fans, and blowers for proper operation;

e. Inspection of HMIWI unit door and door gaskets for proper sealing;

f. Inspection of motors for proper operation;

g. Inspection of primary chamber refractory lining; cleaning and repairing or replacing lining as necessary;

h. Inspection of incinerator shell for corrosion and hot spots;

i. Inspection of secondary and tertiary chamber and stack, cleaning as necessary;

j. Inspection of mechanical loader, including limit switches, for proper operation, if applicable;

k. Visual inspection of waste bed (grates), and repairing or sealing, as appropriate;

l. For the burn cycle that follows the inspection, documentation that the incinerator is operating properly and making any necessary adjustments;

m. Inspection of air pollution control device(s) for proper operation, if applicable;

n. Inspection of waste heat boiler systems to ensure proper operation, if applicable;

o. Inspection of bypass stack components;

p. Ensuring proper calibration of thermocouples, sorbent feed systems and any other monitoring equipment; and

q. Generally observing that the equipment is maintained in good operating condition.

The permittee shall complete all necessary repairs to the medical waste incinerator and associated control devices within 10 days following the inspection unless the Director issues written approval granting the permittee to delay making such repairs until such specific date.

**[40 C.F.R. §§62.12150-12152; 45CSR§§18-7.6.a, b, c, d, e, &f; 45CSR13 – Permit R13-1772, Condition 4.1.7]**

4.1.8. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
**[45CSR§13-5.11.; 45CSR13 - Permit R13-1772 Condition 4.1.8]**

## 4.2. Monitoring Requirements

4.2.1. The permittee shall install, calibrate (to manufacturers' specifications), maintain, and operate a device(s) to continuously measure and record the parameters for the limits specified in Condition 4.1.5. Such devices shall be capable of taking measurement and recording data once per minute on a continuous basis for secondary chamber temperature, pressure drop across the packed bed scrubber, liquor flow rate, and pH of the liquor. The device measuring the charge rate of waste and sorbent flow rate shall be capable of taking and recording readings hourly. Records of such monitoring, which includes records of maintenance and calibrations of monitors, shall be maintained in accordance with Condition 3.4.2.

**[45CSR§18-7.7.d.; 40 C.F.R.§62.12150-12152 and 45CSR13 - Permit R13-1772, Condition 4.2.6]**

4.2.2. The permittee shall install, calibrate (to manufacturers' specifications), maintain, and operate a device or method for measuring the use of the bypass stack including date, time, and duration of each bypass event. Such records of maintenance, calibrations, and events are to be maintained in accordance with Conditions 3.4.2 and 4.4.5.
**[45CSR§18-7.7d; 40 C.F.R. §§62.12150-12152; 45CSR13 - Permit R13-1772, Condition 4.2.5]**

4.2.3. The permittee shall obtain monitoring data at all times during HMIWI operation except during periods of monitoring equipment malfunctions, calibration, or repair. At a minimum, valid monitoring data shall be obtained for 75 percent of the operating hours per day and for 90 percent of the operating days per calendar quarter that the HMIWI is combusting hospital waste and/or medical infectious waste.
**[45CSR§18-7.7d; 40 C.F.R. §§62.12150-12152; 45CSR13 - Permit R13-1772, Condition 4.2.7]**

4.2.4. The permittee shall install, calibrate, maintain, and continuously operate a monitoring device for opacity (COMS) for emissions to the atmosphere from the medical waste incinerator, in accordance with Performance Specification PS-1 of Appendix B to Part 60 of Chapter 40. Such records of maintenance, calibrations, and events are to be maintained in accordance with Conditions 3.4.2 and 4.4.5.
**[45CSR13 – Permit R13-1772, Condition 4.2.1.]**

4.2.5. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Method 9 data indicates noncompliance, the Method 9 data will be used to determine opacity compliance.
**[45CSR13 – Permit R13-1772, Condition 4.2.3.]**

4.2.6. The permittee shall continuously monitor CO emissions using a CO CEMS. Such CO CEMS shall be operated in accordance with the applicable procedures under Appendices B and F to Part 60 of Chapter 40. Using the measured CO reading, the permittee shall determine compliance with the CO limit in Condition 4.1.4 using a 24-hour block average, calculated as specified in Section 12.4.1. of EPA Reference Method 19 of Appendix A-7 of Part 60. The use of CO CEM may be substituted for the CO performance test and minimum secondary chamber temperature to demonstrate compliance. Such records of monitoring data, calibrations, checks, and maintenance of the CEMS shall be maintained in accordance with Condition 3.4.2.
**[45CSR§18-7.7.a.2.; 40 C.F.R. §§62.12150-12152; 45CSR13 – Permit R13-1772, Condition 4.2.4]**

4.2.7. The permittee shall conduct a performance evaluation of the continuous opacity monitoring system (COMS) as specified in Performance Specification 1, Appendix B of 40 C.F.R. 60 and furnish the Director a written report of the results of such performance evaluation. Such records of maintenance, calibration, and events are to be maintained in accordance with conditions 3.4.2. and 4.4.5
**[45CSR13 – Permit R13-1772, Condition 4.2.2]**

## 4.3. Testing Requirements

4.3.1. For the HMIWI, the permittee shall demonstrate compliance with the PM, CO, and HCl emission limits in Condition 4.1.4 by conducting an annual performance test (no more than 12 months from the previous test) using the applicable test procedures and test methods listed in 40C.F.R. §60.56c(b). If all three performance tests over a 3-year period indicate compliance, then the permittee may forego a performance test for that pollutant (PM, CO, or HCl) for the subsequent 2 years. At a minimum, a performance test for PM, CO, and HCl shall be conducted every third year (no more than 36 months following the previous performance test). If a performance test conducted every third year indicates compliance with the emissions limit for a pollutant

(PM, CO, or HCl), permittee may forego a performance test for that pollutant for an additional 2 years. If any performance test indicates noncompliance with the respective emissions limit, a performance test for that pollutant shall be conducted annually until all annual performance tests over a 3-year period indicate compliance with the emissions limit. The use of the bypass stack during a performance test shall invalidate the performance test. Such testing shall be conducted in accordance with Condition 3.3.1 and 40 C.F.R. §60.56c(b). Annual CO performance testing is not required as stipulated in this condition if the permittee is complying with Condition 4.2.6. (40 C.F.R. §60.56c(c)(4)). Records of such testing shall be maintained in accordance with Condition 3.4.2.
**[45CSR§18-7.7.a.; 40 C.F.R.§§62.12150-12152, and 45CSR13 - Permit R13-1772, Condition 4.3.1.]**

4.3.2. At a time when the permittee elects to establish new values for the operating parameters other than the ones stated in Condition 4.1.5., the permittee must conduct a repeat performance test demonstrating compliance with the emission limits in Condition 4.1.4 using the appropriate methods and procedures outlined in 40 C.F.R. §60.56c. The permittee may elect not to conduct CO performance testing if the permittee is complying with condition 4.2.6. (40 C.F.R. §60.56c(c)(4)). The new values for the operating parameters shall be developed as defined in condition 4.1.5 for the corresponding operating parameter. Such testing shall be conducted in accordance with condition 3.3.1. Records of such testing shall be maintained in accordance with Condition 3.4.2.
**[45CSR§18-7.7.a.; 40 C.F.R.§§62.12150-12152; 45CSR13 – Permit R13-1772, Condition 4.3.2.]**

## 4.4. Recordkeeping Requirements

4.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit, and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

**[45CSR13- Permit R13-1772, Condition 4.4.1]**

4.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
**[45CSR13 – Permit R13-1772, Condition 4.4.2.]**

4.4.3. **Record of Malfunction of Air Pollution Control Equipment.** For all air pollution equipment listed in Section 1.0, the permittee shall maintain records or the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded.

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

**[45CSR13 – Permit R13-1772, Condition 4.4.3.]**

4.4.4. The permittee shall maintain records of the annual equipment inspection as required by Condition 4.1.7., which shall include the date of each inspection and description of any repairs made as a result of the inspection. Such records shall be maintained in accordance with Condition 3.4.2.
**[45CSR§18-7.8.b.1.; 40 C.F.R.§§62.12150-12152; 45CSR13 – Permit R13-1772, Condition 4.4.4.]**

4.4.5. The permittee shall maintain records of the following information:

1. Calendar date of each record;

2. Records of the following data:

i. Concentrations of any pollutant listed in Section 4.1.4. of this permit or measurements of opacity as determined by the continuous emission monitoring system if applicable.

ii. Results of fugitive emissions (by EPA Reference Method 22), if applicable;

iii. HMIWI charge dates, times, and weights and hourly charge rates;

iv. Fabric filter inlet temperature during each minute of operation, as applicable;

v. Amount and type of dioxin/furan sorbent used during each hour of operation, as applicable;

vi. Amount and type of Hg sorbent used during each hour of operation, as applicable;

vii. Amount and type of HCI sorbent used during each hour of operation, as applicable;

viii. Secondary chamber temperatures recorded during each minute of operation;

ix. Liquor flow rate to the wet scrubber inlet during each minute of operation, as applicable;

x. Horsepower or amperage to the wet scrubber during each minute of operation, as applicable;

xi. Pressure drop across the wet scrubber system during each minute of operation, as applicable,

xii. Temperature at the outlet from the wet scrubber during each minute of operation, as applicable;

xiii. pH at the inlet to the wet scrubber during each minute of operation, as applicable,

xiv. Records indicating use of the bypass stack, including dates, times, and durations;

3. Identification of calendar days for which data on emission rates or operating parameters specified under 40 C.F.R. §60.58c(b)(2) have not been obtained, with an identification of the emission rates or operating parameters not measured, reasons for not obtaining the data, and a description of corrective actions taken.

4. Identification of calendar days, times and durations of malfunctions, a description of the malfunction and the corrective action taken.

5. Identification of calendar days for which data on emission rates or operating parameters specified 40 C.F.R. §60.58c(b)(2) exceeded the applicable limits, with a description of the exceedances, reasons for such exceedances, and a description of corrective actions taken.

6. Records showing the names of HMIWI operators who have completed review of the information in 40 C.F.R. §60.53c(h) as required by 40 C.F.R. §60.53c(i), including the date of the initial review and all subsequent annual reviews;

7. Records showing the names of the HMIWI operators who have completed the operator training requirements, including documentation of training and the dates of the training;

8. Records showing the names of the HMIWI operators who have met the criteria for qualification under 40 C.F.R. §60.53c and the dates of their qualification; and

9. Records of calibration of any monitoring devices as required under 40 C.F.R. §60.57c(a) through (d).

Records of such information shall be maintained in accordance with Condition 3.4.2.

**[45CSR§18-7.8.a.; 40 C.F.R.§§62.12150-12152; 45CSR13 – Permit R13-1772, Condition 4.4.5.]**

## 4.5. Reporting Requirements

4.5.1. The permittee shall submit semiannual and annual reports to the Director no later than September 15 for semiannual reports and March 15 for annual reports following the previous 6 months (January through June for the semiannual and July through December for the annual reporting periods) in which data were collected. Such reports shall be submitted in accordance with Condition 3.5.1 and a record of each submission shall be maintained in accordance with Condition 3.4.2. The reports shall include the following information:

a. The highest maximum operating parameter and the lowest minimum operating parameter, as applicable, for each operating parameter recorded for the reporting period being reported, pursuant to Condition 4.1.5.

b. The highest maximum operating parameter and the lowest minimum operating parameter, as applicable, for each operating parameter recorded pursuant to Section 4.1.5. of this permit for the calendar year preceding the year being reported, in order to provide the Director with a summary of the performance of the affected facility over a 2-year period. This information is required only for annual compliance reports.

c. Any information recorded under Conditions 4.4.5.3 – 4.4.5.5. of this permit during the reporting period.

d. Any information recorded under Conditions 4.4.5.3 – 4.4.5.5. of this permit for the calendar year preceding the year being reported, in order to provide the Administrator with a summary of the performance of the affected facility over a 2-year period. This information is required only for annual reports.

e. If a performance test was conducted during the reporting period, the results of that test.

f. If no exceedances or malfunctions were reported under Conditions 4.4.5.3 – 4.4.5.5. of this permit for the reporting period being reported, a statement that no exceedances occurred during the reporting period.

g. Any use of the bypass stack, the duration, reason for malfunction, and corrective action taken that occurred during the reporting period.

h. For affected facilities as defined in 40 C.F.R. §§60.50c(a)(3) and (4), records of the annual air pollution control device inspection, any required maintenance, and any repairs not completed within 10 days of an inspection or the timeframe established by the Director.

i. Concentrations of CO as determined by the continuous emissions monitoring system during the reporting period.

j. Any exceedance of Condition 4.1.3 determined using the COMS that occurred during the reporting period.

**[45CSR§§18-7.8.a., 7.8.b.2., & 7.8.c; 40 C.F.R.§§62.12150-12152; 45CSR13 – Permit R13-1772, Condition 4.5.1.]**

4.5.2. Within 60 days after completing the performance testing in accordance with Condition 4.3.2. to establish new values for the operating parameters in Condition 4.1.5., the permittee shall submit a request to update the stated operating limits other than the charge rate of waste or supplemental fuel in Condition 4.1.5 in accordance with 45CSR §13-4.
**[45CSR §18-7.8.a.; 40 C.F.R.§§62.12150-12152; 45CSR13 – Permit R13-1772, Condition 4.5.1.]**

## 4.6. Compliance Plan

4.6.1. None