

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

Joe Manchin, III
Governor

Stephanie R. Timmermeyer
Cabinet Secretary

Permit to Operate



*Pursuant to
Title V
of the Clean Air Act*

Issued to:
**Charleston Area Medical Center
General Division
R30-03900057-2007**

*John A. Benedict
Director*

*Issued: September 24, 2007 • Effective: October 8, 2007
Expiration: September 24, 2012 • Renewal Application Due: March 24, 2012*

Permit Number: **R30-03900057-2010**
Permittee: **Charleston Area Medical Center**
Facility Name: **General Division**
Mailing Address: **3200 MacCorkle Avenue, SE Charleston WV 25304**

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.

Facility Location: Charleston, Kanawha County, West Virginia
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 Code: 8062
UTM Coordinates: 445.19 km Easting • 4244.56 km Northing • Zone 17

Permit Writer: Bobbie Scroggie

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.

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 Unit Description	Year Installed	Design Capacity	Control Device
1S	Medical Waste Incinerator Manufacturer: Consumat Systems, Inc. Model Number: C5-550-2 with Waste Heat Recovery Boiler Maximum Design Heat Input: 9.7 mmBtu/hr Manufacturer: Donlee Technologies, Inc. Model Number:: HRH-1250-2 Pass Serial Number: 453-372W 310687 Rated at: 8,369 mmBtu/hr	1995	1000 lb/hr 1,700,000 lb/yr	Dry Scrubber - Baghouse Manufacturer: Consumat Systems, Inc. Model Number: DS-2180 1C Design Capacity: 6300 ft/min @400°F & 14.5 psia

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
R13-1772E	May 8, 2003

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 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	NESHAPS	National Emissions Standards for Hazardous Air Pollutants
CBI	Confidential Business Information	NO_x	Nitrogen Oxides
CEM	Continuous Emission Monitor	NSPS	New Source Performance Standards
CES	Certified Emission Statement	PM	Particulate Matter
C.F.R. or CFR	Code of Federal Regulations	PM₁₀	Particulate Matter less than 10µm in diameter
CO	Carbon Monoxide	pph	Pounds per Hour
C.S.R. or CSR	Codes of State Rules	ppm	Parts per Million
DAQ	Division of Air Quality	PSD	Prevention of Significant Deterioration
DEP	Department of Environmental Protection	psi	Pounds per Square Inch
FOIA	Freedom of Information Act	SIC	Standard Industrial Classification
HAP	Hazardous Air Pollutant	SIP	State Implementation Plan
HON	Hazardous Organic NESHAP	SO₂	Sulfur Dioxide
HP	Horsepower	TAP	Toxic Air Pollutant
lbs/hr	Pounds per Hour	TPY	Tons per Year
LDAR	Leak Detection and Repair	TRS	Total Reduced Sulfur
m	Thousand	TSP	Total Suspended Particulate
MACT	Maximum Achievable Control Technology	USEPA	United States Environmental Protection Agency
mm	Million	UTM	Universal Transverse Mercator
mmBtu/hr	Million British Thermal Units per Hour	VEE	Visual Emissions Evaluation
mmft³/hr	Million Cubic Feet Burned per Hour	VOC	Volatile Organic Compounds
NA or N/A	Not Applicable		
NAAQS	National Ambient Air Quality Standards		

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, firm, corporation, association or public agency 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, suffer, allow or permit 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 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 and 45CSR15]
- 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.

[WV Code § 22-5-4(a)(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 certification to the USEPA as required in 3.5.5 below, aAll 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, mailed first class, or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

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

Phone: 304/926-0475
FAX: 304/926-0478

If to the US EPA:

Associate Director
Office of Enforcement and Permits Review
(3AP12)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

- 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 annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: [R3 APD Permits@epa.gov](mailto:R3_APD_Permits@epa.gov). The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. **[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. **[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. 45CSR13 R13-1772E references 40CFR§60.57c(c) as an applicable requirement, however the CAMC - General Division's HMIWI does not use something other than a dry scrubber. R13-1772E cites 40 CFR § 60.39e as an applicable requirement, however this requirement is for the State to meet, not the facility.

- b. 45CSR20 CAMC - General Division's HMIWI stack is less than 213 feet high, which is below the Good Engineering Practice stack height limit in Section 2.4.a.

- c. 45CSR§21-40.1. The aggregate maximum theoretical VOC emissions are less than the 100 tons per year threshold.

- d. 40 CFR part 60, subpart Ec CAMC - General Division's HMIWI was constructed before the June 20, 1996 applicability date.

- e. 40 CFR part 64 CAMC - General Division's original Title V Permit specified continuous compliance determination methods, therefore this facility is exempt from CAM in accordance with 40 CFR § 64.2(b)(6).

4.0. Medical Waste Incinerator/Waste Heat Recovery Boiler and Dry Scrubber Requirements [Emission point 1S]

4.1. Limitations and Standards

- 4.1.1. Emission of Visible Particulate Matter --No person shall cause, suffer, allow or permit emission of smoke into the atmosphere from any incinerator which is twenty (20%) percent opacity or greater.
[45CSR§6-4.3. and 45CSR13 - Permit R13-1772, Conditions B.2. and B.5.]
- 4.1.2. No person shall cause, suffer, allow or permit the emission of particles of unburned or partially burned refuse or ash from any incinerator which are large enough to be individually distinguished in the open air.
[45CSR§6-4.5. and 45CSR13 - Permit R13-1772, Conditions B.2. and B.5.]
- 4.1.3. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
[45CSR§6-4.6. and 45CSR13 - Permit R13-1772, Conditions B.2. and B.5.]
- 4.1.4. Incineration of Residues and Hazardous Materials--Persons responsible for the incineration of hazardous materials such as insecticides, empty insecticide containers, toxic materials, certain chemical residues, explosives, used bandages and other medical wastes, pathological wastes, human and animal remains and other like materials shall give the utmost care and consideration to the potential harmful effects of the emissions resulting from such activities. Evaluation of these facilities as to adequacy, efficiency and emission potential will be made on an individual basis by the Director, working in conjunction with other appropriate governmental agencies.
[45CSR§6-4.7. and 45CSR13 - Permit R13-1772, Conditions B.2. and B.5.]
- 4.1.5. No person ~~shall~~ **may** construct, reconstruct, modify, or operate, or cause to be constructed, reconstructed, modified, or operated a HMIWI which results in a violation of [40 CFR Part 60 Subpart Ec, or](#) this rule.
[45CSR§~~18-6.124-4.1~~ ; [40 C.F.R. §§62.12150-12152](#) and 45CSR13 - Permit R13-1772, Condition B.2.]
- 4.1.6. Each existing 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 4.1.6.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 provisions:
 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 malfunction;
 - 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 administered by the instructor.
 3. Reference material distributed to the attendees covering the course topics.
- d. Qualification shall be obtained by completion of a training course that satisfies the criteria under Section 4.1.6.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 read to malfunction; and
5. Discussion of operating 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 4.1.6.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 4.1.6.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 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 4.1.6.h. annually with each HMIWI operator (defined in 40 CFR § 60.51c).
 1. The initial review of the information listed in Section 4.1.6.h. of this permit shall be conducted prior to assumption of responsibilities affecting HMIWI operation.
 2. Subsequent reviews of the information listed in Section 4.1.6.h. of this permit shall be conducted annually.
- j. The information listed in Section 4.1.6.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§18-6.3.c-24-4.3.b;40 C.F.R.§§62.12150-12152, and 45CSR13 - Permit R13-1772, Conditions B.2., B.8., B.9. and 40 CFR §60.34e]

4.1.7. Each existing HMIWI shall comply with the Waste management plan specified in 40 CFR §60.55c as follows:

West Virginia Department of Environmental Protection • Division of Air Quality

Approved: September 24, 2007; Modified: December 21, 2009

The owner or operator of an affected facility 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 incinerated waste. A waste management plan may include, but is not limited to, elements such as paper, cardboard, plastics, glass, battery, or metal recycling; or 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.

[45CSR§18-6.3.d24-4.3.c ; 40 C.F.R.§§62.12150-12152 , and 45CSR13 - Permit R13-1772, Conditions B.2., B.8., B.9. and 40 CFR §60.35e]

- 4.1.8. Each existing HMIWI shall comply with the Opacity requirements specified in 40 CFR §60.52c(b) as follows:

No owner or operator of an HMIWI shall cause to be discharged into the atmosphere from the stack of that HMIWI any gases that exhibit greater than 10 percent opacity (6-minute block average). Compliance with this limit demonstrates compliance with and 40 CFR § 60.33e(c).

[45CSR§18-6.3.h24-4.3.g ; 40 C.F.R.§§62.12150-12152 , 45CSR13 - Permit R13-1772, Conditions A.6., B.2., B.8., B.9. and 40 CFR § 60.33e(c)]

- 4.1.9. Emissions of regulated air pollutants to the atmosphere from the medical waste incinerator shall not exceed the hourly and annual emission limitations as set forth in the following table:

Pollutant	Emission Limitations		
	Concentration	PPH	TPY
PM ₁₀	0.013 grains/dscf	0.30	0.90
SO ₂	45 ppm _v	1.20	3.60
CO	40 ppm _v	0.44	1.31
NO _x	210 ppm _v	2.60	7.80
VOC	0.0385 grains/dscf	0.05	0.16
HCl	42 ppm _v	0.622	1.87
Mercury	210 grains/10 ⁶ dscf	0.0046	0.014
Cadmium	22 grains/10 ⁶ dscf	0.0004896	0.0015
Lead	44 grains/10 ⁶ dscf	0.00098	0.00294
Dioxins/furans (total CCD/CDF)		0.000000756	0.0000023
Compliance with the above limits shall demonstrate compliance with the less stringent limits in 45CSR§18-6.3.a24-4.3.a. and 40 CFR § 60.33e(a)			

Dioxins/furans (total CCD/CDF)	55 grains/10 ⁹ dscf Total CCD/CDF or 1.0 grains/10 ⁹ dscf TEQ*		
Compliance with the Dioxins/furans concentration limit shall demonstrate compliance with the less stringent limit in Permit R13-1772.			
*TEQ = Toxic Equivalency of 2, 3, 7, 8 - Tetrachlorinated Dibenzo - p - Dioxin			

[45CSR13 - Permit R13-1772, Conditions A.1., B.2., B.8., B.9., 45CSR§~~18-6.3.a~~24-4.3.a;40 C.F.R. §§62.12150-12152, and 40 CFR § 60.33e(a)]

4.1.10. The waste feed rate to the medical waste incinerator shall not exceed 1,000 pounds per hour and 1,700,000 pounds per year. A maximum of ten (10%) percent of the total annual volume may come from non-CAMC related facilities and from drugs confiscated by law enforcement. CAMC facilities include the General Hospital, Memorial Hospital, and the Women’s and Children’s Hospital.

[45CSR13 - Permit R13-1772, Condition A.2.]

4.1.11. The medical waste incinerator shall not be charged with any hazardous waste as defined in 45CSR25.

[45CSR13 - Permit R13-1772, Condition A.3.]

4.1.12. The secondary chamber temperature of the medical waste incinerator shall be maintained at a minimum of 1800°F during the combustion of waste. Gases shall be subjected to this temperature for not less than 2 seconds.

[45CSR13 - Permit R13-1772, Condition A.4.]

4.1.13. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[45CSR13 - Permit R13-1772, Condition A.19.]

4.2. Monitoring Requirements

4.2.1. Each existing HMIWI shall comply with the monitoring requirements of 40 C.F.R. §60.57c as follows:

- a. The owner or operator of an affected facility shall install, calibrate (to manufacturers' specifications), maintain, and operate devices (or establish methods) for monitoring the applicable maximum and minimum operating parameters listed in the following table such that these devices (or methods) measure and record values for these operating parameters at the frequencies indicated in the table at all times except during periods of startup and shutdown:

Operating parameters to be monitored	Minimum Frequency	
	Data measurement	Data recording
Maximum operating parameters:		
Maximum charge rate	Continuous	Once per hour
Maximum fabric filter inlet temperature	Continuous	Once per minute

Maximum flue gas temperature	Continuous	Once per minute
Minimum operating parameters:		
Minimum secondary chamber temperature	Continuous	Once per minute
Minimum dioxin/furan sorbent flow rate	Hourly	Once per hour
Minimum HCl sorbent flow rate	Hourly	Once per hour
Minimum mercury (Hg) sorbent flow rate	Hourly	Once per hour

- b. The owner or operator of an affected facility 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.
- c. The owner or operator of an affected facility shall obtain monitoring data at all times during HMIWI operation except during periods of monitoring equipment malfunction, 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 affected facility is combusting hospital waste and/or medical/infectious waste.

[45CSR§~~18-6.3.f~~24-4.3.e; 40 C.F.R. §§62.12150-12152 and 45CSR13 - Permit R13-1772, Conditions B.2., B.8., B.9. and 40 CFR §60.37e(c)]

4.2.2. The medical waste incinerator shall incorporate accurately calibrated instrumentation to provide a continuous temperature readout indicating the temperature of the primary and secondary combustion chambers during incinerator operation. The temperature readings shall be recorded at a minimum frequency of one reading per minute. These records shall be retained for a minimum of five (5) years on site and shall be made available, upon request, to the Director or his or her duly authorized representative.

[45CSR13 - Permit R13-1772, Condition A.5.]

4.2.3. The permittee shall install, calibrate, maintain, and continuously operate a monitoring device for opacity for emissions to the atmosphere from the medical waste incinerator, in accordance with an approved method by the Division of Air Quality.

[45CSR13 - Permit R13-1772, Condition A.7.]

4.2.4. 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 A.9.]

4.2.5. The permittee shall provide the Director at least 30 days prior notice of any performance evaluation to afford the Director the opportunity to have an observer present.

[45CSR13 - Permit R13-1772, Condition A.18.]

4.3. Testing Requirements

4.3.1. Each existing HMIWI shall comply with the Compliance and performance testing specified in 40 CFR § 60.56c as follows, excluding the fugitive emissions testing requirements under 40 CFR §§60.56c(b)(12) and (c)(3):

- a. The emission limits under 40 CFR part 60, subpart Ec apply at all times except during periods of startup, shutdown, or malfunction, provided that no hospital waste or medical/infectious waste is charged to the affected facility during startup, shutdown, or malfunction.
- b.
 1. All performance tests shall consist of a minimum of three test runs conducted under representative operating conditions.
 2. The minimum sample time shall be 1 hour per test run unless otherwise indicated.
 3. EPA Reference Method 1 of 40 CFR part 60, appendix A shall be used to select the sampling location and number of traverse points.
 4. EPA Reference Method 3, 3A, or 3B of 40 CFR part 60, appendix A shall be used for gas composition analysis, including measurement of oxygen concentration. EPA Reference Method 3, 3A, or 3B of 40 CFR part 60, appendix A shall be used simultaneously with each reference method.
 5. The pollutant concentrations shall be adjusted to 7 percent oxygen using the following equation:

$$C_{adj} = C_{meas} (20.9 - 7)/(20.9 - \%O_2)$$

where:

C_{adj} = pollutant concentration adjusted to 7 percent oxygen;

C_{meas} = pollutant concentration measured on a dry basis (20.9 - 7) = 20.9 % oxygen - 7 % oxygen (defined oxygen correction basis);

20.9 = oxygen concentration in air, percent; and

$\%O_2$ = oxygen concentration measured on a dry basis, percent.

6. EPA Reference Method 5 of 40 CFR part 60, appendix A shall be used to measure the particulate matter emissions.
7. EPA Reference Method 9 of 40 CFR part 60, appendix A shall be used to measure stack opacity.
8. EPA Reference Method 10 of 40 CFR part 60, appendix A shall be used to measure the CO emissions.
9. EPA Reference Method 23 of 40 CFR part 60, appendix A shall be used to measure total dioxin/furan emissions. The minimum sample time shall be 4 hours per test run. If the affected facility has selected the toxic equivalency standards for dioxin/furans, under Section 4.1.8. of this permit, the following procedures shall be used to determine compliance:
 - i. Measure the concentration of each dioxin/furan tetra-through octa-congener emitted using EPA Reference Method 23.
 - ii. For each dioxin/furan congener measured in accordance with Section 4.3.1.b.9.i. of this permit, multiply the congener concentration by its corresponding toxic equivalency factor specified in the following table:

Dioxin/furan congener	Toxic equivalency factor
2,3,7,8-tetrachlorinated dibenzo-p-dioxin	1
1,2,3,7,8-pentachlorinated dibenzo-p-dioxin	0.5

Dioxin/furan congener	Toxic equivalency factor
1,2,3,4,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,7,8,9-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,6,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzo-p-dioxin	0.01
octachlorinated dibenzo-p-dioxin	0.001
2,3,7,8-tetrachlorinated dibenzofuran	0.1
2,3,4,7,8-pentachlorinated dibenzofuran	0.5
1,2,3,7,8-pentachlorinated dibenzofuran	0.05
1,2,3,4,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,7,8,9-hexachlorinated dibenzofuran	0.1
2,3,4,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzofuran	0.01
1,2,3,4,7,8,9-heptachlorinated dibenzofuran	0.01
Octachlorinated dibenzofuran	0.001

iii. Sum the products calculated in accordance with Section 4.3.1.b.9.ii. to obtain the total concentration of dioxins/furans emitted in terms of toxic equivalency.

10. EPA Reference Method 26 of 40 CFR part 60, appendix A shall be used to measure HCl emissions.

11. EPA Reference Method 29 of 40 CFR part 60, appendix A shall be used to measure Pb, Cd, and Hg emissions.

c. The owner or operator of an affected facility shall:

1. Determine compliance with the opacity limit by conducting an annual performance test (no more than 12 months following the previous performance test) using the applicable procedures and test methods listed in Section 4.3.1.b. of this permit.

2. Determine compliance with the PM, CO, and HCl emission limits by conducting an annual performance test (no more than 12 months following the previous performance test) using the applicable procedures and test methods listed in Section 4.3.1.b. of this permit. If all three performance tests over a 3-year period indicate compliance with the emission limit for a pollutant (PM, CO, or HCl), the owner or operator may forego a performance test for that pollutant 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 any performance test indicates noncompliance with the respective emission 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 emission limit. The use of the bypass stack during a performance test shall invalidate the performance test.
3. Facilities using a CEMS to demonstrate compliance with any of the emission limits under Section 4.1.9. of this permit shall:
 - i. Determine compliance with the appropriate emission limit(s) using a 12-hour rolling average, calculated each hour as the average of the previous 12 operating hours (not including startup, shutdown, or malfunction).
 - ii. Operate all CEMS in accordance with the applicable procedures under 40 CFR part 60, appendices B and F.
 - d. The owner or operator of an affected facility equipped with a dry scrubber followed by a fabric filter shall:
 1. Establish the appropriate maximum and minimum operating parameters, indicated in the table in Section 4.2.1. of this permit for each control system, as site specific operating parameters during the initial performance test to determine compliance with the emission limits; and
 2. Ensure that the affected facility does not operate above any of the applicable maximum operating parameters or below any of the applicable minimum operating parameters listed in the table in Section 4.2.1. of this permit and measured as 3-hour rolling averages (calculated each hour as the average of the previous 3 operating hours) at all times except during periods of startup, shutdown and malfunction. Operating parameter limits do not apply during performance tests. Operation above the established maximum or below the established minimum operating parameter(s) shall constitute a violation of established operating parameter(s).
 - e. Except as provided in Section 4.3.1.f. of this permit, for affected facilities equipped with a dry scrubber followed by a fabric filter:
 1. Operation of the affected facility above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a 3-hour rolling average) simultaneously shall constitute a violation of the CO emission limit.
 2. Operation of the affected facility above the maximum fabric filter inlet temperature, above the maximum charge rate, and below the minimum dioxin/furan sorbent flow rate (each measured on a 3-hour rolling average) simultaneously shall constitute a violation of the dioxin/furan emission limit.
 3. Operation of the affected facility above the maximum charge rate and below the minimum HCl sorbent flow rate (each measured on a 3-hour rolling average) simultaneously shall constitute a violation of the HCl emission limit.
 4. Operation of the affected facility above the maximum charge rate and below the minimum Hg sorbent flow rate (each measured on a 3-hour rolling average) simultaneously shall constitute a violation of the Hg emission limit.
 5. Use of the bypass stack (except during startup, shutdown, or malfunction) shall constitute a violation of the PM, dioxin/furan, HCl, Pb, Cd and Hg emission limits.

- f. The owner or operator of an affected facility may conduct a repeat performance test within 30 days of violation of applicable operating parameter(s) to demonstrate that the affected facility is not in violation of the applicable emission limit(s). Repeat performance tests conducted pursuant to this paragraph shall be conducted using the identical operating parameters that indicated a violation under Section 4.3.1.e. of this permit.
- g. The owner or operator of an affected facility may conduct a repeat performance test at any time to establish new values for the operating parameters. The Administrator may request a repeat performance test at any time.

[45CSR§~~18-6.3.e~~~~24-4.3.d~~ : 40 C.F.R. §§62.12150-12152, and 45CSR13 - Permit R13-1772, Conditions B.2., B.8., B.9. and 40 CFR §60.37e(a)]

- 4.3.2. For the hospital medical waste incinerator, the permittee shall conduct or have conducted stack tests every three (3) years from the initial stack test. Tests shall be conducted for emission limits established in Section 4.1.9. of this permit with the exception of Sulfur Dioxide. Tests shall be conducted in accordance with Section 4.3.1. of this permit. EPA Reference Method 7 of 40 CFR part 60, appendix A shall be used to measure the Nitrogen Oxides emissions.

[45CSR13 - Permit R13-1772, Conditions A.16., A.17., and A.27.]

4.4. Recordkeeping Requirements

- 4.4.1. Each existing HMIWI shall comply with the reporting and recordkeeping requirements specified in 40 CFR §60.58c as follows, excluding sections 40 CFR §§60.58c (a), (b)(2)(ii), and (b)(7):

- a. The owner or operator of an affected facility shall maintain the following information (as applicable) for a period of at least 5 years:
 - 1. Calendar date of each record;
 - 2. Records of the following data:
 - i. Concentrations of any pollutant listed in Section 4.1.9. of this permit or measurements of opacity as determined by the continuous emission monitoring system (if applicable);
 - ii. HMIWI charge dates, times, and weights and hourly charge rates;
 - iii. Fabric filter inlet temperatures during each minute of operation, as applicable;
 - iv. Amount and type of dioxin/furan sorbent used during each hour of operation, as applicable;
 - v. Amount and type of Hg sorbent used during each hour of operation, as applicable;
 - vi. Amount and type of HCl sorbent used during each hour of operation, as applicable;
 - vii. Secondary chamber temperatures recorded during each minute of operation;
 - viii. 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 Section 4.4.1.a.2. of this permit 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 under Section 4.4.1.a.2. of this permit exceeded the applicable limits, with a description of the exceedances, reasons for such exceedances, and a description of corrective actions taken.
 6. The results of the initial, annual, and any subsequent performance tests conducted to determine compliance with the emission limits and/or to establish operating parameters, as applicable.
 7. Records showing the names of HMIWI operators who have completed review of the information in Section 4.1.6.h of this permit as required by Section 4.1.6.i. of this permit, including the date of the initial review and all subsequent annual reviews;
 8. 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;
 9. Records showing the names of the HMIWI operators who have met the criteria for qualification under Section 4.1.6. of this permit and the dates of their qualification; and
 10. Records of calibration of any monitoring devices as required under Section 4.2.1. of this permit.
- b. An annual report shall be submitted 1 year following the submission of the initial performance test and subsequent reports shall be submitted semiannually. The annual report shall include the information specified in Section 4.4.1.b.1. through b.8. of this permit. All reports shall be signed by the facilities manager.
1. The values for the site-specific operating parameters established pursuant to Section 4.3.1.d. of this permit, as applicable.
 2. The highest maximum operating parameter and the lowest minimum operating parameter, as applicable, for each operating parameter recorded for the calendar year being reported, pursuant to Section 4.3.1.d., as applicable.
 3. The highest maximum operating parameter and the lowest minimum operating parameter, as applicable for each operating parameter recorded pursuant to Section 4.3.1.d. 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.
 4. Any information recorded under Sections 4.4.1.a.3. through a.5. of this permit for the calendar year being reported.

5. Any information recorded under Sections 4.4.1.a.3. through a.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.
 6. If a performance test was conducted during the reporting period, the results of that test.
 7. If no exceedances or malfunctions were reported under Sections 4.4.1.a.3. through a.5. of this permit for the calendar year being reported, a statement that no exceedances occurred during the reporting period.
 8. Any use of the bypass stack, the duration, reason for malfunction, and corrective action taken.
- c. The owner or operator of an affected facility shall submit semiannual reports containing any information recorded under Sections 4.4.1.a.3. through a.5. of this permit no later than 60 days following the reporting period. The first semiannual reporting period ends 6 months following the submission of information in Section 4.4.1.b. of this permit. Subsequent reports shall be submitted no later than 6 calendar months following the previous report. All reports shall be signed by the facilities manager.
- d. All records specified under Section 4.4.1.a. of this permit shall be maintained onsite in either paper copy or computer-readable format, unless an alternative format is approved by the Administrator.
[45CSR§~~18-6.3.g.24-4.3.f~~; 40 C.F.R. §§62.12150-12152 and 45CSR13 - Permit R13-1772, Conditions B.2, B.8., B.9. and 40 CFR §60.38e]
- 4.4.2. The permittee shall maintain an operator's log, utilizing the form identified as Attachment A. This log shall show the pounds of waste charged, the primary and secondary temperatures, the date and time of each charge, the operating start and stop time, and the time spent removing the ash and cleaning the incinerator. This log will be retained on-site for a period of at least five (5) years and shall be made available to the Director or his or her authorized representative upon request. Such records shall be initialed and signed by the operator(s) certifying records to be true and accurate.
[45CSR13 - Permit R13-1772, Condition A.10.]
- 4.4.3. The permittee shall maintain an additional operator's log, utilizing the form identified as Attachment B, showing on a monthly basis the total number of charging hours, the total waste charged in pounds, and the total waste charged in pounds per hour. This log will be retained on-site and shall be submitted to the WVDAQ no later than fifteen (15) days after the end of each calendar month. Such records shall be signed by the operator(s) certifying records to be true and accurate. Compliance with the annual throughput limit of waste shall be determined using a rolling yearly total. A rolling yearly total shall mean the amount of waste charged at any given time for a previous twelve (12) consecutive months.
[45CSR13 - Permit R13-1772, Condition A.11.]
- 4.4.4. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this permit recorded in a permanent form suitable for inspection. The file shall be retained for at least five (5) year following the date of such measurements, maintenance, reports, and records.
[45CSR13 - Permit R13-1772, Condition A.13.]

- 4.4.5. The permittee shall document any event which occurs that inhibits proper operation or causes parameters to exceed allowable ranges (for example, spikes in temperature). Explanations shall be documented on the operator's log at the time of such occurrences.
[45CSR13 - Permit R13-1772, Condition A.14.]
- 4.4.6. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device.
[45CSR13 - Permit R13-1772, Condition A.15.]
- 4.4.7. To determine compliance with Sections 4.1.8. through 4.1.13., 4.2.2. through 4.2.4., 4.3.2., 4.4.2. through 4.4.6., and 4.5.1. of this permit, the permittee shall monitor and maintain a certified record of the medical waste incinerator feed rate, and record this data on the Attachments to this permit or on similar forms which contain the required information. All records must be signed by a "Responsible Official" within fifteen (15) days after the end of the calendar month utilizing the Certification of Data Accuracy statement at the end of this permit. These records shall be maintained on site for a period of no less than five (5) years, and shall be made available to the Director or a duly authorized representative of the Director upon request.
[45CSR13 - Permit R13-1772, Condition A.26.]

4.5. Reporting Requirements

- 4.5.1. The permittee shall submit an excess emissions and monitoring systems performance report and/or a summary report form to the Director quarterly. All reports shall be postmarked by the 30th day following the end of each calendar quarter. Written reports of excess emissions shall include the following information:
- a. The magnitude of excess emissions computed in accordance with Section 4.2.3. of this permit, any conversion factor(s) used, the date and time of commencement and completion of each time period of excess emissions, and the process operating time during the reporting period.
 - b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
 - c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
 - d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
 - e. The summary report form shall contain the information and be in the format shown in Attachment C of this permit unless otherwise specified by the Director.
 - f. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described need not be submitted unless requested by the Director.
 - g. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of

the total operating time for the reporting period, the summary report form and the excess emission report described shall both be submitted.

[45CSR13 - Permit R13-1772, Condition A.12.]

- 4.5.2. Where reports are required to be submitted to the ~~Secretary~~ Director under the terms of a permit issued pursuant to 45 CSR 13, 45 CSR 14, 45 CSR 19, or 45 CSR 30, the reports shall be signed and certified in accordance with the requirements of the applicable permitting rule. Where reports are required to be submitted to the Director under this rule, and no permit is in effect under 45 CSR 13, 45 CSR 14, 45 CSR 19, or 45 CSR 30, the report shall be signed by the facility manager and shall contain a certification stating that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[45CSR§~~18-6.524-4.5~~ : [40 C.F.R. §§62.12150-12152](#) and 45CSR13 - Permit R13-1772, Condition B.8.]

4.6. Compliance Plan

- 4.6.1. None.

ATTACHMENT B

CHARLESTON AREA MEDICAL CENTER

Hospital Medical Infectious Waste Incinerator

MONTH:

DAY	WASTE CHARGED (LB)	CHARGING TIME (HR)	LBS/HR	SIGNATURE
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
TOTAL				
12 Month Rolling Total				
Permitted Limit	1,700,000 lb/yr		1,000 lb/hr	

No later than fifteen (15) days after the end of each month mail to:
 West Virginia Division of Air Quality
 601 57th Street, SE
 Charleston, West Virginia 25304

ATTACHMENT C

CHARLESTON AREA MEDICAL CENTER

Hospital Medical Infectious Waste Incinerator

SUMMARY REPORT

GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE

Pollutant (Circle One) – CO / Opacity _____

Reporting period dates: From _____ to _____

Company _____

Emission Limitation _____

Address _____

Monitor Manufacturer and Model No. _____

Date of Latest CMS Certification or Audit _____

Process Unit(s) Description _____

Total source operating time in reporting period¹ _____

Emission data summary ¹		CMS performance summary ¹	
1. Duration of excess emissions in reporting		1. CMS downtime in reporting period due to:	
a. Startup/Shutdown		a. Monitor equipment malfunctions	
b. Control equipment problems		b. Non-monitor equipment malfunctions	
c. Process problems		c. Quality assurance calibration	
d. Other known causes		d. Other known causes	
e. Unknown causes		e. Unknown causes	
2. Total duration of excess emissions		2. Total CMS downtime	
3. Total duration of excess emissions × 100% ² [Total source operating time]		3. Total CMS downtime × 100% ² [Total source operating time]	

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in SPECIFIC REQUIREMENT A.12 shall be submitted.

On a separate page, describe any changes since last quarter in CMS, process or controls. I certify that the information contained in this report is true, accurate, and complete.

Name: _____

Signature: _____

Title: _____

Date: _____

1 The CERTIFICATION OF DATA ACCURACY statement appearing on the reverse side must be completed within fifteen (15) days of the end of the reporting period.

2 This record shall be maintained on site for a period of five (5) years from the date of certification. It shall be made available upon request to the Director or his or her authorized representative.

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that all information contained in the attached, representing the period beginning _____ and ending _____, and any supporting documents hereto, is true and correct to the best of my knowledge and that all reasonable efforts have been made to provide the most comprehensive information possible.

Name (Type or Print): _____

Signature¹: _____

Title: _____

Date: _____

Telephone No.: _____

Fax No.: _____

¹ This form shall be signed by a "Responsible Official". "Responsible Official" means one of the following:

- a. For a corporation: the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either (i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or (ii) the delegation of authority to such representative is approved in advance by the Director;
- b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of the U.S. EPA); or
- d. The designated representative delegated with such authority and approved in advance by the Chief.