



State of Utah

Department of  
Environmental Quality

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DIVISION OF AIR QUALITY  
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DAQE-AN0354010-04

April 12, 2004

Martha D. Shaub  
Director, Environmental Health and Safety  
University of Utah  
Building 605  
125 South Fort Douglas Blvd.  
Salt Lake City, Utah 84112

Dear Ms. Shaub:

Re: Approval Order: Consolidation of Eight (8) Approval Orders: DAQE-081-02, DAQE-264-01, DAQE-265-01, DAQE-128-01, DAQE-712-99, DAQE-962-96, DAQE-0607-93, and 1-16-81.  
Salt Lake County – CDS A; NA; MAINT; NSPS, Title V  
Project Code: N0354-010

The attached document is the Approval Order (AO) for the above-referenced project.

Future correspondence on this Approval Order should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Mr. Robert Grandy. He may be reached at (801) 536-4024.

Sincerely,

Richard W. Sprott, Executive Secretary  
Utah Air Quality Board

RWS:RG;jc

cc: Salt Lake Valley Health Department  
Mike Owens, EPA Region VIII

**STATE OF UTAH**

**Department of Environmental Quality**

**Division of Air Quality**

**APPROVAL ORDER: CONSOLIDATION OF EIGHT (8)  
APPROVAL ORDERS**

**Prepared By: Robert Grandy, Engineer  
(801) 536-4024  
Email: rgrandy@utah.gov**

**APPROVAL ORDER NUMBER**

**DAQE-AN0354010-04**

**Date: April 12, 2004**

**University of Utah**

**Source Contact  
Michele Johnson  
(801) 581-6590**

**Richard W. Sprott  
Executive Secretary  
Utah Air Quality Board**

*Abstract*

*The University of Utah has been operating under eight (8) Approval Orders (AOs) for their air emissions. The purpose of this modification is to consolidate those AO's into one document. The following changes will also be made:*

- *removal redundant conditions,*
- *addition of new equipment,*
- *addition of previously permitted facilities now under University control,*
- *deletion of previously permitted facilities no longer under University control, and*
- *an update of requirements.*

*Emissions from the University of Utah are primarily due to the operation of: boilers, comfort heating equipment, and emergency generators. Large boilers located on the Lower Campus are covered by the Utah State Implementation Plan (SIP) Section IX, Part H.2. Large boilers located at Upper Campus, Huntsman Cancer Institute, Eccles Critical Care Pavilion, Emma-Eccles-Jones Medical Research Center, and at Rice Stadium are not covered by the SIP, but are subject to the New Source Performance Standard (NSPS) found in 40 CFR Part 60, Subpart Dc.*

*There will be an emissions increase resulting from the installation of new boilers and generators. Emissions, in tons per year, will increase as follows: PM<sub>10</sub> 1.3, SO<sub>2</sub> 2.3, NO<sub>x</sub> 11.9, CO 25.4, VOC 1.3, HAPs 0.3.*

*The University of Utah is a major source of carbon monoxide (CO) and oxides of nitrogen (NO<sub>x</sub>). The University of Utah is located in Salt Lake County, a non-attainment area of the National Ambient Air Quality Standards (NAAQS) for PM<sub>10</sub> and SO<sub>2</sub>, and is a maintenance area for CO and ozone. Title V of the 1990 Clean Air Act applies to this source. The Title V Permit for this source must be administratively amended based on the changes in this AO, prior to operation of the modification.*

The project has been evaluated and found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307). A public comment period was held in accordance with UAC R307-401-4 and no comments were received. This air quality Approval Order (AO) authorizes the project with the following conditions, and failure to comply with any of the conditions may constitute a violation of this order.

**General Conditions:**

1. This Approval Order (AO) applies to the following company:

<u>Site Office</u>	<u>Corporate Office Location</u>
The University of Utah 1705 E. South Campus Drive Salt Lake City, Utah 84112 Phone: (801) 581-6590 Fax: (801) 585-7240	The University of Utah 201 Presidents Circle, Rm 209 Salt Lake City, UT 84113 Phone: (801) 581-6404 Fax: (801) 585-4972

The equipment listed in this AO shall be operated at the following location:

The University of Utah, Salt Lake City, Salt Lake County

Universal Transverse Mercator (UTM) Coordinate System: UTM Datum NAD27  
4,512.8 kilometers Northing; 429.4 kilometers Easting; Zone 12

2. All definitions, terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code (UAC) Rule 307 (R307) and Title 40 of the Code of Federal Regulations (40 CFR). Unless noted otherwise, references cited in these AO conditions refer to those rules.
3. The limits set forth in this AO shall not be exceeded without prior approval in accordance with R307-401.
4. Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved in accordance with R307-401-1.
5. All records referenced in this AO or in applicable NSPS standards, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the five-year period prior to the date of the request. Records shall be kept for five years.
6. The University of Utah shall operate the equipment listed in Condition #9 of this AO in accordance with the terms and conditions of this AO, which was written pursuant to the University of Utah's Notice of Intent submitted to the Division of Air Quality (DAQ) on December 16, 2002, and additional information submitted on August 5, 2003, September 26, 2003, and October 10, 2003.
7. Regardless of any inconsistency between conditions of this AO and Section IX, Part H, 2.a, and Subparts 2.b. YY (The University of Utah - Salt Lake City: Hot Water Plant) of the State Implementation Plan (SIP) for Davis and Salt Lake Counties, this AO shall take precedence. The language of Section IX, Part H, 2.a, and Section IX, Part H, 2.b.YY have been incorporated in this AO.
8. This AO shall replace the following AO's:

DAQE-081-02	dated	January 29, 2002
DAQE-264-01	dated	April 26, 2001
DAQE-265-01	dated	April 26, 2001
DAQE-128-01	dated	February 20, 2001
DAQE-712-99	dated	August 31, 1999
DAQE-962-96	dated	October 15, 1996
DAQE-0607-93	dated	July 28, 1993
01/16/81	dated	January 16, 1981
9. The approved installations shall consist of the following equipment or equivalent\*:
  - A. **Misc. Parts Washers (subject to R307-335-2)**  
Unit Description: Miscellaneous parts washers located on campus using VOC containing solvents and subject to R307-335-2. Does not include parts washers using citrus based solvents.

- B. **LC Boilers**  
 Unit Description: Five pre-NSPS boilers located on the lower campus (LC) in Building 303 that can burn natural gas or coal. Boilers 1-2 are rated at approximately 60 MMBTU/hr each. Boilers 3-5 are rated at approximately 105 MMBTU/hr each.
- C. **UH Boilers**  
 Unit Description: Three natural gas/diesel fired boilers located at the University Hospital. One boiler rated about 9.83 MMBTU/hr (Building 521). Two boilers rated about 9.88 MMBTU/hr each (Building 525).
- D. **Misc Equipment**  
 Unit Description: Miscellaneous natural gas fired boilers, hotwater heaters, and comfort heaters, each with a rating less than 5 MMBTU/hr\*\*. Also, natural gas fired emergency generators with a total combined rating of 620 kW. Does not include equipment at Rice Stadium, New Student Housing, University Hospital, Huntsman Cancer Institute, or Combustion Lab.
- E. **Diesel-Generators**  
 Unit Description: Emergency diesel generators with an approx. combined capacity of 9,885 kW located in the following buildings: 3, 4, 7, 13, 14, 19, 28, 35, 49, 57, 63, 64, 66, 82, 84, 86, 87, 95, 179, 205, 210, 213, 301, 303, 305, 347, 500, 521, 525, 533, 540, 570, 585, 587, 697, 801, and 853.
- F. **UC NSPS Boilers**  
 Unit Description: Three NSPS boilers (Subpart Dc) located at the upper campus (UC) high temperature water-heating plant. Boilers all have 15% flue gas recirculation, and are fired on natural gas or diesel. Approximate rating for each boiler is 87.5 MMBTU/hr.
- G. **UC Diesel Emergency Generator**  
 Unit Description: One diesel fired emergency generator located at the upper campus (UC) high temperature water-heating plant. Approximate rating is 800 kW. Located in building 302.
- H. **New Student Housing-Rice Stadium NG Equipment**  
 Unit Description: Includes all natural gas fired equipment located in New Student Housing and Rice Stadium.
  - 1) **Rice Stadium NSPS Boiler**  
 Unit Description: Natural gas fired boiler rated at approximately 14.7 MMBTU/hr. Subject to NSPS, 40 CFR, Part 60, Subpart Dc).
  - 2) **Rice Stadium Small Boiler**  
 Unit Description: Boiler rated at less than 5 MMBTU/hr\*\*, located on east side of stadium.
- I. **Rice Stadium Emergency Diesel Generator**  
 Unit Description: One diesel fired emergency generator having an approximate rating of 900 kW (1337 bhp).
- J. **New Student Housing Emergency Diesel Generators**  
 Unit Description: Three diesel fired emergency generators identified as follows: Building 800, approximate rating of 66 kW (68 bhp); Building 815, approximate rating of 66 kW (68 bhp); Building 821, approximate rating of 208 kW (317 bhp).

- K. **Combustion Lab- U-Furnace**  
 Unit Description: Natural gas fired U-furnace that can burn natural gas, coal, and various other experimental fuels. Located in the Merrill Engineering Building, room 2505b. This furnace has an approximate rating of 0.15 MMBTU/hr.
- L. **Paint Booth and Print Plant Combined**  
 Unit Description: Includes the paint booth located in Building 350 and equipment located in the printing plant.
- 1) **Print Plant**  
 Unit Description: Printing operations including letter and offset presses.
  - 2) **Paint Booth**  
 Unit Description: Painting operation located in Building 350 used primarily for refinishing wood furniture. Equipped with particulate filters.
- M. **Huntsman Cancer Institute (Phase I).**  
 Unit Description: Includes two NSPS Boilers (~16.8 MMBTU/hr each), two Small Boilers (~5 MMBTU/hr each)\*\*, and two diesel emergency generators(~2,000 kW and ~750 kW).
- 1) **Huntsman Cancer Institute (Phase I) - NSPS Boilers**  
 Unit Description: Two natural gas/diesel fired boilers, each rated approximately 16.8 MMBTU/hr. Subject to NSPS, 40 CFR, Part 60, Subpart Dc. Located in building 555.
  - 2) **Huntsman Cancer Institute (Phase I) - Small Boilers**  
 Unit Description: Two small natural gas/diesel fired boilers, each rated at approximately 5 MMBTU/hr\*\*. Located in building 555.
  - 3) **Huntsman Cancer Institute (Phase I)- Diesel Em. Generators.**  
 Unit Description: Two diesel-fired emergency generators rated at approximately 750 kW and 2,000 kW. Located in building 555.
- N. **Eccles Critical Care Pavilion.**
- 1) **Eccles Critical Care Pavilion: NSPS Boilers 1-2.**  
 Unit Description: Two boilers with approximate input ratings of 15.0 MMBTU each, fired on either natural gas or fuel oil. Located in building 529.
  - 2) **Eccles Critical Care Pavilion: Emergency Diesel Generator.**  
 Unit Description: One diesel fired emergency generator with approximate rating of 1,000 kW. Located in building 529.
- O. **Huntsman Cancer Institute-Phase II.**
- 1) **Huntsman Cancer Institute-Phase II: Boilers 1-2.**  
 Unit Description: Two boilers with approximate input ratings of 6.0 MMBTU each, fired on either natural gas or fuel oil. Located in building 556.
  - 2) **Huntsman Cancer Institute-Phase II: Emergency Diesel Generators.**  
 Unit Description: Two diesel fired emergency generators with approximate ratings of 1,500 kW each. Located in building 556.
- P. **Emma Eccles Jones Medical Research Center.**
- 1) **Emma-Eccles-Jones Medical Research Center: NSPS Boiler.**  
 Unit Description: One boiler with an approximate input rating of 19.0 MMBTU, fired on natural gas. Located in building 565.

- 2) **Emma-Eccles-Jones Medical Research Center: Emergency Diesel Generator.**  
Unit Description: One diesel fired emergency generator with an approximate rating of 1,000 kW. Located in building 565.
- Q. **Moran Eye Center Phase I.**
  - 1) **Moran Eye Center Phase I: Emergency Diesel Generator.**  
Unit Description: One diesel fired emergency generator with an approximate rating of 500 kW. Located in building 550.
  - 2) **Moran Eye Center Phase I: Out of Service Boiler.**  
Unit Description: A boiler listed for identification purposes that is on-site but out of service.
- R. **Moran Eye Center Phase II.**  
**Moran Eye Center Phase II: Emergency Diesel Generators.**  
Unit Description: Two diesel fired emergency generators with an approximate ratings of 300 and 700 kW. Located in building 523.
- S. **Health Sciences Education Building**  
**Health Sciences Education Building: Emergency Diesel Generators.**  
Unit Description: One diesel fired emergency generator with an approximate rating of 400 kW. Located in building 575.
- T. **Olympic Cauldron**  
Unit Description: This is a seldom used ornamental monument from the Salt Lake 2002 Olympics. Listed for identification purposes only.
- U. **University Hospital Ethylene Oxide Sterilizer**  
Unit Description: This is a small sterilization unit unregulated due to size. Listed for identification purposes only.
- V. **Incinerator**  
Unit Description: Incinerator for the combustion of pathological waste, low level radioactive waste, or chemotherapeutic waste. The incinerator is located in the Animal Resource Center.
- W. **Fume Hoods**  
Unit Description: Fume hoods located in the Art Department and in various labs throughout the campus.
- X. **Small Fuel Storage Tanks**  
Unit Description: Various fuel tanks located throughout the campus; each tank has a storage capacity of 10,000 gallons or less. No unit-specific applicable requirements.
- Y. **Fuel Storage Tanks (NSPS)**  
Unit Description: Located at University Hospital. Two diesel tanks approximately 20,000 gallons each, one diesel tank approximately 30,000 gallons, and one jet fuel tank approximately 12,000 gallons. These tanks are subject to 40 CFR Part 60, Subpart Kb.

\* Equivalency shall be determined by the Executive Secretary.

\*\* Listed for identification purposes only.

**Site-wide Limitations and Tests Procedures**

- 10. At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any equipment approved under this Approval Order 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 Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded.

11. The permittee shall burn #2 diesel/fuel oil or better in all equipment permitted for diesel/fuel oil combustion. Fuel receipts shall be maintained to demonstrate usage of the following fuels: Grade Low Sulfur No. 1-D, Grade Low Sulfur No. 2-D, Grade No. 1-D, and Grade No. 2-D.
12. Unless stated otherwise in this permit start-up maintenance firing of each emergency generator shall not exceed 25 hours per rolling 12-month period. Emergency generators shall be used for electricity production only during periods when electric power from the utilities is interrupted. Records shall be maintained for each generator including: dates of use, reason for use (maintenance, emergency, other), and total hours of start-up maintenance usage calculated with a 12-month rolling total by the twentieth day of each month using the previous twelve months data.
13. The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring.
14. The owner/operator shall comply with R307-107. General Requirements: Unavoidable Breakdowns.

#### **Unit Specific Limitations and Tests Procedures:**

##### **Conditions on Misc. Parts Washers (that use volatile organic compound (VOC) containing solvents)**

15. Each parts washer using solvents containing volatile organic compounds (VOC) shall comply with R307-335-2.

##### **Conditions on LC Boilers, UH Boilers, Misc Equipment, and Generators**

16. The following consumption limits shall not be exceeded:
  - (A) 945.8 MM SCF of natural gas per rolling 12-month period for LC Boilers 1-5, of which total consumption of natural gas for LC Boilers 3-5 shall not exceed 698 MM SCF per rolling 12-month period.
  - (B) 200 MM SCF of natural gas per rolling 12-month period for the UH Boilers, and Misc Equipment.
  - (C) 1,060 tons of coal per rolling 12-month period for Boilers 1-5.

Fuel consumption shall be determined based on a 12-month rolling total calculated by 20th day of each month using the previous 12 months data. Monthly natural gas consumption for LC Boilers 1-5 shall be determined using gas meters installed on each boiler. Monthly natural gas consumption for other boilers and generators shall be determined using

monthly billings. Monthly coal consumption shall be determined with coal firing records for Boilers 1-5.

**Conditions on LC Boilers 1-2**

17. Emissions of the specified pollutants from LC Boilers 1&2 shall not exceed the amounts listed in 17(A) and shall be tested according to 17(B)-(H):

(A) From each boiler while burning natural gas: NO<sub>x</sub> 10.0 lb/hr and 117 ppm<sub>dv</sub> (3% O<sub>2</sub> dry).

(B) Stack testing frequency: at least every 3 years based on the date of the last stack test.

(C) Sample location: 40 CFR 60, Appendix A, Method 1.

(D) Volumetric flow rate: 40 CFR 60, Appendix A, Method 2.

(E) Stack testing methods: NO<sub>x</sub>: 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D or 7E.

(F) Calculations: To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(G) Production rate during testing: The production rate during testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

(H) Notification: At least 30 days prior to conducting stack testing, the permittee shall notify the Executive Secretary of the date, time and place of such testing. A source test protocol shall be submitted along with the testing notification sent to the Executive Secretary. The source test protocol shall be approved by the Executive Secretary prior to testing. The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. A pretest conference shall be held, if directed by the Executive Secretary. The pretest conference shall include representation from the permittee, the tester, and the Executive Secretary. The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Executive Secretary. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

**Conditions on LC Boilers 3-5**

18. Emissions of the specified pollutants from LC Boilers 3-5 shall not exceed the amounts listed in 18(A) and shall be tested according to 18(B)-(H):

(A) For each boiler while burning natural gas: NO<sub>x</sub> 25.0 lb/hr and 187 ppm<sub>dv</sub> (3% O<sub>2</sub> dry).

(B) Stack testing frequency: at least every 3 years based on the date of the last stack test.

(C) Sample location: 40 CFR 60, Appendix A, Method 1.

(D) Volumetric flow rate: 40 CFR 60, Appendix A, Method 2.

(E) Stack testing methods: 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D or 7E.

(F) Calculations: To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(G) Production rate during testing: The production rate during testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

(H) Notification: At least 30 days prior to conducting stack testing, the permittee shall notify the Executive Secretary of the date, time and place of such testing. A source test protocol shall be submitted along with the testing notification sent to the Executive Secretary. The source test protocol shall be approved by the Executive Secretary prior to testing. The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. A pretest conference shall be held, if directed by the Executive Secretary. The pretest conference shall include representation from the permittee, the tester, and the Executive Secretary. The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Executive Secretary. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

**Conditions on LC Boilers 1-5**

19. Natural gas shall be used as the primary fuel in LC Boilers 1-5. Coal shall be used only during periods of natural gas curtailment and for maintenance firing in Boilers 1-5. Natural gas curtailment is defined as periods when the natural gas provider/supplier imposes a curtailment or interruption of service, and the curtailment is involuntary and beyond the control of the permittee. Maintenance firings shall not exceed 1 percent of the annual BTU requirement. In addition, maintenance firings shall only be scheduled between March 1, and October 31 of any calendar year.

Records documenting fuel usage shall be kept showing: dates that natural gas was fired, dates that coal was fired, the duration in hours that coal was fired, the amount of coal consumed, and the reason for firing coal.

Records documenting the BTU content of all fuel fired annually and BTU content of all fuel fired for maintenance purposes shall be maintained. That information shall be used to demonstrate that annual boiler maintenance firings do not exceed 1 percent of the annual BTU requirement as follows:

$$\text{Annual boiler maintenance firings as a percentage of annual BTU requirement} = \frac{\text{Total BTU content of fuel fired for annual maintenance}}{\text{annual BTU requirement}} * 100$$

Emissions estimates from coal combustion shall be included in the inventory reports.

20. Visible emissions shall be not greater than 10 percent opacity. Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.
21. Sulfur content of coal or any mixture of coals burned in L C Boilers 1-5 shall be no greater than 0.6 percent by weight.

**Conditions on UH Boilers**

22. Visible emissions shall be not greater than 10 percent opacity. Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.
23. Fuel for the UH Boilers shall be limited to natural gas with the exception of fuel oil combusted during maintenance firings and for periods of natural gas curtailment. Natural gas curtailment is defined as a period when the natural gas supplier imposes a curtailment or interruption of service, and the curtailment is involuntary and beyond the control of the permittee. Maintenance firings shall not exceed 1 percent of the total annual Btu production. In addition, maintenance firings shall be scheduled between March 1st and October 31st.

Records documenting fuel usage shall be kept showing: dates that natural gas was fired, dates that fuel oil was fired, the duration in hours that fuel oil was fired, the amount of fuel oil consumed, and the reason for firing fuel oil.

Records documenting the total BTU's of all fuel fired annually and total BTU's of all fuel fired for maintenance purposes shall be maintained. That information shall be used to demonstrate that annual boiler maintenance firings do not exceed 1 percent of the annual BTU requirement as follows:

Annual boiler maintenance firings as a percentage of annual BTU requirement = (Total BTU's of fuel fired for annual maintenance/Total BTU's of all fuel fired annually)\* 100

### **Conditions on Misc Equipment**

24. Visible emissions shall be not greater than 10 percent opacity. Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.
25. Maintenance firing of the generator located in the Madsen Clinic-Building 685, shall not exceed 35 hours per rolling 12-month period. Emergency generators shall be used for electricity production only during periods when electric power from the utilities is interrupted.

#### **Monitoring and Recordkeeping:**

Records shall be maintained for the generator including: dates of use, reason for use (maintenance, emergency, other), total hours of start-up maintenance usage, total hours of emergency usage, total hours of usage calculated with a 12-month rolling total by the twentieth day of each month using the previous twelve months data.

### **Conditions on Diesel-Generators**

26. Visible emissions shall be not greater than 20 percent opacity except for operation not exceeding 3 minutes in any hour.

#### **Monitoring & Recordkeeping:**

Opacity observations shall be conducted annually for each generator in accordance with 40 CFR 60, Appendix A, Method 9. A log of opacity determinations shall be maintained including all data required by 40 CFR 60, Appendix A, Method 9.

27. Maintenance firing for each of the following generators shall not exceed the hours specified:
  - a. 1,000 kW generator (building 525/Hospital) - 35 hours per rolling 12-month period.
  - b. 1,000 kW generator (building 521/School of Medicine) - 35 hours per rolling 12-month period.
  - c. 500 kW generator (building 521/School of Medicine) - 35 hours per rolling 12-month period.
  - d. 500 kW generator (building 521/School of Medicine) - 35 hours per rolling 12-month period.
  - e. 600 kW generator (building 303/Lower Campus High Temperature Water Plant) - 50 hours per rolling 12-month period.

These emergency generators shall be used for electricity production only during periods when electric power from the utilities is interrupted.

Monitoring and Recordkeeping:

Records shall be maintained for each generator including: dates of use, reason for use (maintenance, emergency, other), total hours of start-up maintenance usage, total hours of emergency usage, total hours of usage calculated with a 12-month rolling total by the twentieth day of each month using the previous twelve months data.

**Conditions on UC NSPS Boilers**

28. Visible emissions shall be not greater than 10 percent opacity. Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.
29. Fuel for Upper Campus Boilers 1-3 shall be limited to natural gas with the exception of fuel oil combusted during maintenance firings and for periods of natural gas curtailment. Natural gas curtailment is defined as a period when the natural gas supplier imposes a curtailment or interruption of service, and the curtailment is involuntary and beyond the control of the permittee. Maintenance firings shall not exceed 1 percent of the total annual BTU production. In addition, maintenance firings shall be scheduled between March 1st and October 31st.

Records documenting fuel usage shall be kept showing: dates that natural gas was fired, dates that fuel oil was fired, the duration in hours that fuel oil was fired, the amount of fuel oil consumed, and the reason for firing fuel oil.

Records documenting the total BTU's of all fuel fired annually and total BTU's of all fuel fired for maintenance purposes shall be maintained. That information shall be used to demonstrate that annual boiler maintenance firings do not exceed 1 percent of the annual BTU requirement as follows:

Annual boiler maintenance firings as a percentage of annual BTU requirement =  $(\text{Total BTU's of fuel fired for annual maintenance} / \text{Total BTU's of all fuel fired annually}) * 100$

30. The permittee shall comply with all applicable requirements of *40 CFR 60, Subpart A: General Provisions*.
31. The permittee shall comply with all applicable requirements of *40 CFR 60, Subpart Dc: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*.
32. The following limits shall not be exceeded:
  - A. 858 MM SCF of natural gas per rolling 12-month period for all UC NSPS Boilers.
  - B. 25 hours of maintenance operation per rolling 12-month period for each boiler when fired on diesel.

Fuel consumption shall be determined based on a 12-month rolling total calculated by 20th day of each month using the previous 12 months data. Monthly natural gas consumption shall be determined using gas meters installed on each boiler.

Records of consumption shall be kept on a monthly basis (per approval letter from EPA Region 8, dated November 25, 2003). Records documenting boiler maintenance shall be kept and shall include: date of boiler maintenance, duration in hours, and fuel type used.

#### **Conditions on UC Diesel Emergency Generator**

33. Visible emissions shall be not greater than 20 percent opacity except for operation not exceeding 3 minutes in any hour.

##### **Monitoring & Recordkeeping:**

Opacity observations of emissions shall be conducted annually in accordance with 40 CFR 60, Appendix A, Method 9. A log of opacity determinations shall be maintained including all data required by 40 CFR 60, Appendix A, Method 9.

34. Maintenance firing of the emergency generator in building 302 shall not exceed 60 hours per rolling 12-month period. The emergency generator shall be used for electricity production only during periods when electric power from the utilities is interrupted.

##### **Monitoring and Recordkeeping:**

Records shall be maintained for the generator including: dates of use, reason for use (maintenance, emergency, other), total hours of start-up maintenance usage, total hours of emergency usage, total hours of usage calculated with a 12-month rolling total by the twentieth day of each month using the previous twelve months data.

#### **Conditions on New Student Housing -Rice Stadium NG Equipment**

35. Natural gas usage shall be no greater than 165 MM SCF per 12-month rolling period. Based on the first day of each month, a new 12-month total shall be calculated using data from the previous twelve months. Monthly calculations shall be made no later than 20 days after the end of each calendar month. For the Rice Stadium NSPS boiler, consumption shall be determined monthly (per approval letter from EPA Region 8, dated November 25, 2003) using a gas meter. For all other natural gas fired equipment, consumption shall be determined using monthly billings. Records of each 12-month rolling total of natural gas usage shall be maintained for a period of at least five years from the date of each calculation.

#### **Conditions on Rice Stadium NSPS Boiler**

36. Visible emissions shall be not greater than 10 percent opacity. Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.
37. The permittee shall comply with all applicable requirements of *40 CFR 60, Subpart A: General Provisions*.

38. The permittee shall comply with all applicable requirements of 40 CFR 60, Subpart Dc: *Standards of Performance for Small Industrial-Institutional-Institutional Steam Generating Units*, with the exception of a monthly period for fuel monitoring (per approval letter from EPA Region 8, dated November 25, 2003).

**Conditions on Rice Stadium Small Boiler**

39. Visible emissions shall be not greater than 10 percent opacity. Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.

**Conditions on Rice Stadium Emergency Diesel Generator**

40. Visible emissions shall be not greater than 10 percent opacity except for operation not exceeding 3 minutes in any hour.

Monitoring & Recordkeeping:

Opacity observations shall be conducted annually in accordance with 40 CFR 60, Appendix A, Method 9. A log of opacity determinations shall be maintained including all data required by 40 CFR 60, Appendix A, Method 9.

**Conditions on New Student Housing Emergency Diesel Generators**

41. Visible emissions shall be not greater than 10 percent opacity except for operation not exceeding 3 minutes in any hour.

Monitoring & Recordkeeping:

Opacity observations shall be conducted annually for each generator in accordance with 40 CFR 60, Appendix A, Method 9. A log of opacity determinations shall be maintained including all data required by 40 CFR 60, Appendix A, Method 9.

**Conditions on Combustion Lab-U-Furnace**

42. Visible emissions shall be no greater than 20 percent opacity. Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.
43. Hours of operation while using coals and various other experimental fuels shall not exceed 2,500 hours per 12-month period. The feed rate of coal shall not exceed 10 lbs/hr. Based on the 1st day of each month, using the previous twelve months data, a rolling 12-month total shall be calculated for hours of operation using fuels other than natural gas. Hourly coal feed rates shall also be recorded.
44. Natural gas consumption shall be no greater than 5,276,400 cubic feet per rolling 12-month period. Based on the first day of each month, a new 12-month rolling total shall be calculated within 20 days of the beginning of each month using data from the previous

twelve months. Usage shall be determined from monthly gas bills. Records of consumption shall be maintained for a minimum of five years from the date of calculation.

**Conditions on Paint Booth and Print Plant Combined**

- 45. Combined emissions of VOC from the Paint Booth and Print Plant shall not exceed 5.0 tons per rolling 12-month period. Combined HAP emissions from the Paint Booth and Print Plant shall not exceed 1.0 tons per rolling 12-month period. HAP and VOC emissions shall be calculated on a rolling 12-month total. Based on the first day of each month, a new 12-month total shall be calculated using data from the previous twelve months. Monthly calculations shall be made no later than 20 days after the end of each calendar month.

VOC and HAP emissions shall be determined by maintaining a record of VOC and HAP emitting materials used each month. The records shall include the following data for each material used:

- A. Name of the VOC or HAP emitting material, such as; paint, adhesive, solvent, thinner, reducers, chemical compounds, toxics, isocyanates, etc.
- B. Density of each material used (pounds per gallon).
- C. Percent by weight of VOC and HAP in each material used.
- D. Gallons of each VOC and HAP emitting material used each month.
- E. The amount of VOC and individual HAP emitted monthly by each material used, calculated by the following procedure:

$$\text{VOC} = \frac{(\% \text{ VOC by Weight})}{(100)} \times \frac{(\text{Density lb})}{(\text{gal})} \times (\text{Gal Consumed}) \times \frac{(1 \text{ ton})}{(2,000 \text{ lb})}$$

$$\text{HAP} = \frac{(\% \text{ HAP by Weight})}{(100)} \times \frac{(\text{Density lb})}{(\text{gal})} \times (\text{Gal Consumed}) \times \frac{(1 \text{ ton})}{(2,000 \text{ lb})}$$

- F. The total amount of VOC and HAP emitted monthly from all materials used.
- G. The amount of VOC and HAP reclaimed for the month shall be similarly quantified and subtracted from the quantities calculated above, to provide the monthly total VOC and HAP emissions.

**Conditions on Print Plant**

- 46. Solvent wiping cloths shall be kept in covered containers when not in use.
- 47. Solvents containing volatile organic compounds (VOC) shall be kept in covered containers when not in use.

**Conditions on Paint Booth**

48. Visible emissions shall be no greater than 10 percent opacity. Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.

**Conditions on Huntsman Cancer Institute (Phase I)**

49. Combined usage of natural gas by the boilers shall not exceed 212.10 MM SCF per rolling 12-month period. Fuel consumption shall be determined on a rolling 12-month total with a new total calculated by the 20th day of each month using data from the previous 12 months. Usage shall be determined from monthly gas bills. Records of consumption shall be maintained for a minimum of five years from the date of calculation.

**Conditions on Huntsman Cancer Institute (Phase I)- NSPS Boilers**

50. Visible emissions shall be not greater than 10 percent opacity. Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.
51. The permittee shall comply with all applicable requirements of *40 CFR 60, Subpart A: General Provisions*.
52. The permittee shall comply with all applicable requirements of *40 CFR 60, Subpart Dc: Standards of Performance for Small Industrial-Institutional-Institutional Steam Generating Units*, with the exception of a monthly period for fuel monitoring (per approval letter from EPA Region 8, dated November 25, 2003).
53. Fuel shall be limited to natural gas with the exception of fuel oil combusted during maintenance firings and for periods of natural gas curtailment. Natural gas curtailment is defined as a period when the natural gas supplier imposes a curtailment or interruption of service, and the curtailment is involuntary and beyond the control of the permittee. Maintenance firings shall not exceed 1 percent of the total annual BTU production. In addition, maintenance firings shall be scheduled between March 1st and October 31st.

**Monitoring & Recordkeeping:**

Records documenting fuel usage shall be kept showing: dates that natural gas was fired, dates that fuel oil was fired, the duration in hours that fuel oil was fired, the amount of fuel oil consumed, and the reason for firing fuel oil.

Records documenting the total BTU's of all fuel fired annually and total BTU's of all fuel fired for maintenance purposes shall be maintained. That information shall be used to demonstrate that annual boiler maintenance firings do not exceed 1 percent of the annual BTU requirement as follows:

Annual boiler maintenance firings as a percentage of annual BTU requirement = (Total BTU's of fuel fired for annual maintenance/Total BTU's of all fuel fired annually)\* 100

**Conditions on Huntsman Cancer Institute (Phase I)- Small Boilers**

54. Visible emissions shall be not greater than 10 percent opacity. Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.
55. Fuel shall be limited to natural gas with the exception of fuel oil combusted during maintenance firings and for periods of natural gas curtailment. Natural gas curtailment is defined as a period when the natural gas supplier imposes a curtailment or interruption of service, and the curtailment is involuntary and beyond the control of the permittee. Maintenance firings shall not exceed 1 percent of the total annual BTU production. In addition, maintenance firings shall be scheduled between March 1st and October 31st.

**Monitoring & Recordkeeping:**

Records documenting fuel usage shall be kept showing: dates that natural gas was fired, dates that fuel oil was fired, the duration in hours that fuel oil was fired, the amount of fuel oil consumed, and the reason for firing fuel oil.

Records documenting the total BTU's of all fuel fired annually and total BTU's of all fuel fired for maintenance purposes shall be maintained. That information shall be used to demonstrate that annual boiler maintenance firings do not exceed 1 percent of the annual BTU requirement as follows:

Annual boiler maintenance firings as a percentage of annual BTU requirement = (Total BTU's of fuel fired for annual maintenance/Total BTU's of all fuel fired annually)\* 100

**Conditions on Huntsman Cancer Institute (Phase I)- Diesel Em. Generators.**

56. Visible emissions shall be not greater than 20 percent opacity except for operation not exceeding 3 minutes in any hour.

**Monitoring & Recordkeeping:**

Opacity observations shall be conducted annually for each generator in accordance with 40 CFR 60, Appendix A, Method 9. A log of opacity determinations shall be maintained including all data required by 40 CFR 60, Appendix A, Method 9.

57. Use of each generator, including maintenance, shall not exceed 300 hours per rolling 12-month period.

Records shall be maintained for each generator including: dates of use, total hours of emergency usage, and total hours of usage calculated with a 12-month rolling total by the twentieth day of each month using the previous twelve months data.

**Conditions on Incinerator**

58. Visible emissions shall be not greater than 20 percent opacity. Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.
59. The permittee shall verify exemption from R307-222 (Emissions Standards: Existing Incinerators for Hospital, Medical, Infectious Wastes) by keeping readily accessible records demonstrating that only pathological, low-level radioactive, and chemotherapeutic

wastes, or combination of those wastes, are being incinerated. Records shall be maintained for a minimum of five years from the date of usage.

**Conditions on Fume Hoods**

60. A list of fume hoods located throughout the campus shall be maintained. The list of fume hoods shall be reviewed every six months and updated as necessary.

**Conditions on Fuel Storage Tanks (NSPS)**

61. The permittee shall comply with all applicable requirements of *40 CFR 60, Subpart A: General Provisions*.
62. The permittee shall comply with all applicable requirements of *40 CFR 60, Subpart Kb: Standards of Performance for Volatile Organic Liquid Storage Vessels*.

**Eccles Critical Care Pavilion**

63. Visible emissions from the *Eccles Critical Care Pavilion: NSPS Boilers 1-2* shall be not greater than 10 percent opacity.

Monitoring & Recordkeeping:

During periods when natural gas is being burned, use of that fuel type shall be verified in lieu of monitoring via visible emissions observations.

If a boiler is operated on fuel oil for longer than 12 consecutive hours, then an opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, by a certified visible emissions observer (VEO). If the boiler continues to operate on fuel oil for consecutive days following the initial observation, an opacity determination shall be performed on a daily basis. A log of opacity determinations shall be maintained including all data required by 40 CFR 60, Appendix A, Method 9.

64. *Eccles Critical Care Pavilion: NSPS Boilers 1-2* shall only be used during maintenance firings and during periods when the Upper Campus High Temperature Water Plant is out of service or when the connection to the Upper Campus High Temperature Water Plant is lost. Fuel shall be limited to natural gas with the exception of #2 fuel oil (or lower sulfur fuel oil) combusted during maintenance firings and for periods of natural gas curtailment. Natural gas curtailment is defined as a period when the natural gas supplier imposes a curtailment or interruption of service, and the curtailment is involuntary and beyond the control of the permittee. Maintenance firings shall be scheduled between March 1st and October 31st.

Monitoring & Recordkeeping:

Records documenting fuel usage shall be kept showing: dates that natural gas was fired, dates that fuel oil was fired, grade of fuel oil fired, the duration in hours that each fuel type was fired, and the reason for each fuel usage (e.g.: “#2 fuel oil used 12/25/03 for 30 minutes during routine maintenance firing”).

65. The *Eccles Critical Care Pavilion: NSPS Boilers 1-2* shall be operated in compliance with all applicable requirements of 40 CFR 60 Subpart A.

Monitoring & Recordkeeping:

In accordance with 40 CFR 60.7(b), the permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of affected emission unit; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. The permittee shall comply with reporting and notification requirements of 40 CFR 60 Subpart A.

66. The permittee shall keep daily records of the amounts of each fuel combusted each day, for *Eccles Critical Care Pavilion: NSPS Boilers 1-2*.

Monitoring & Recordkeeping:

Fuel consumption for each affected emission unit shall be determined by a fuel meter, fuel vendor receipts, or other method approved by the Executive Secretary.

67. Visible emission from the *Eccles Critical Care Pavilion: Emergency Diesel Generator* shall be no greater than 20 percent opacity except for operation not exceeding 3 minutes in any hour.

Monitoring & Recordkeeping:

Opacity observations shall be conducted annually in accordance with 40 CFR 60, Appendix A, Method 9. A log of opacity determinations shall be maintained including all data required by 40 CFR 60, Appendix A, Method 9.

68. Maintenance firing of the *Eccles Critical Care Pavilion: Emergency Diesel Generator* shall not exceed 35 hours per rolling 12-month period. The emergency generator shall be used for electricity production only during periods when electric power from the utilities is interrupted.

Monitoring and Recordkeeping:

Records shall be maintained for the generator including: dates of use, reason for use (maintenance, emergency, other), total hours of start-up maintenance usage, total hours of emergency usage, total hours of usage calculated with a 12-month rolling total by the twentieth day of each month using the previous twelve months data.

**Huntsman Cancer Institute-Phase II**

69. Visible emissions from the *Huntsman Cancer Institute-Phase II: Boilers 1-2*, shall be not greater than 10 percent opacity.

Monitoring & Recordkeeping:

During periods when natural gas is being burned, use of that fuel type shall be verified in lieu of monitoring via visible emissions observations.

If a boiler is operated on fuel oil for longer than 12 consecutive hours, then an opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, by a certified visible emissions observer (VEO). If the boiler continues to operate on fuel oil for consecutive days following the initial observation, an opacity determination shall be performed on a daily basis. A log of opacity determinations shall be maintained including all data required by 40 CFR 60, Appendix A, Method 9.

70. *Huntsman Cancer Institute-Phase II*: Fuel usage for boilers 1-2 shall be limited to natural gas with the exception of fuel oil combusted only during maintenance firings and for periods of natural gas curtailment. Natural gas curtailment is defined as a period when the natural gas supplier imposes a curtailment or interruption of service, and the curtailment is involuntary and beyond the control of the permittee. Maintenance firings shall be scheduled between March 1st and October 31st.

Monitoring & Recordkeeping:

Records documenting fuel usage shall be kept showing: dates that natural gas was fired, dates that fuel oil was fired, grade of fuel oil fired, the duration in hours that each fuel type was fired, and the reason for each fuel usage (e.g.: “#2 fuel oil used 12/25/03 for 30 minutes during routine maintenance firing”).

71. Visible emission from the *Huntsman Cancer Institute-Phase II: Emergency Diesel Generators* shall be no greater than 20 percent opacity except for operation not exceeding 3 minutes in any hour.

Monitoring & Recordkeeping:

Opacity observations shall be conducted annually for each generator in accordance with 40 CFR 60, Appendix A, Method 9. A log of opacity determinations shall be maintained including all data required by 40 CFR 60, Appendix A, Method 9.

72. Maintenance firing of the *Huntsman Cancer Institute-Phase II: Emergency Diesel Generators* shall not exceed 35 hours each per rolling 12-month period. The emergency generators shall be used for electricity production only during periods when electric power from the utilities is interrupted.

Monitoring and Recordkeeping:

Records shall be maintained for each generator including: dates of use, reason for use (maintenance, emergency, other), total hours of start-up maintenance usage, total hours of emergency usage, total hours of usage calculated with a 12-month rolling total by the twentieth day of each month using the previous twelve months data.

**Emma-Eccles-Jones Medical Research Center.**

73. Visible emissions from the *Emma-Eccles-Jones Medical Research Center: NSPS Boiler* shall be not greater than 10 percent opacity.

Monitoring & Recordkeeping:

In lieu of visible emissions observations, records of fuel usage shall be maintained to demonstrate that only natural gas is being burned.

74. The *Emma-Eccles-Jones Medical Research Center: NSPS Boiler* shall only be used during maintenance firings and during periods when the Upper Campus High Temperature Water Plant is out of service or when the connection to the Upper Campus High Temperature Water Plant is lost.

Monitoring & Recordkeeping:

Records shall be kept documenting the following information for each usage: date, duration, and reason.

75. The *Emma-Eccles-Jones Medical Research Center: NSPS Boiler* shall be operated in compliance with all applicable requirements of 40 CFR 60 Subpart A.

Monitoring & Recordkeeping:

In accordance with 40 CFR 60.7(b), the permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of affected emission unit; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. The permittee shall comply with reporting and notification requirements of 40 CFR 60 Subpart A.

76. The permittee shall keep daily records of the amounts of each fuel combusted each day, for the *Emma-Eccles-Jones Medical Research Center: NSPS Boiler*.

Monitoring & Recordkeeping:

Fuel consumption for each affected emission unit shall be determined by a fuel meter, fuel vendor receipts, or other method approved by the Executive Secretary.

77. Visible emission from the *Emma-Eccles-Jones Medical Research Center: Emergency Generator* shall be no greater than 20 percent opacity except for operation not exceeding 3 minutes in any hour.

Monitoring & Recordkeeping:

Opacity observations shall be conducted annually in accordance with 40 CFR 60, Appendix A, Method 9. A log of opacity determinations shall be maintained including all data required by 40 CFR 60, Appendix A, Method 9.

78. Maintenance firing of the *Emma-Eccles-Jones Medical Research Center: Emergency Generator* shall not exceed 35 hours per rolling 12-month period. The emergency generator shall be used for electricity production only during periods when electric power from the utilities is interrupted.

Monitoring and Recordkeeping:

Records shall be maintained for the generator including: dates of use, reason for use (maintenance, emergency, other), total hours of start-up maintenance usage, total hours of emergency usage, total hours of usage calculated with a 12-month rolling total by the twentieth day of each month using the previous twelve months data.

**Moran Eye Center Phase I**

79. Maintenance firing of the 500 kW generator located in building 550 shall not exceed 35 hours per rolling 12-month period. Emergency generators shall be used for electricity production only during periods when electric power from the utilities is interrupted.

Monitoring and Recordkeeping:

Records shall be maintained including: dates of use, reason for use (maintenance, emergency, other), total hours of start-up maintenance usage, total hours of emergency usage, total hours of usage calculated with a 12-month rolling total by the twentieth day of each month using the previous twelve months data.

80. Visible emissions from the *Moran Eye Center Phase I: Emergency Diesel Generator* shall be no greater than 20 percent opacity except for operation not exceeding 3 minutes in any hour.

Monitoring & Recordkeeping:

Opacity observations shall be conducted annually in accordance with 40 CFR 60, Appendix A, Method 9. A log of opacity determinations shall be maintained including all data required by 40 CFR 60, Appendix A, Method 9.

**Moran Eye Center Phase II.**

81. Visible emissions from the *Moran Eye Center Phase II: Emergency Diesel Generators* shall be no greater than 20 percent opacity except for operation not exceeding 3 minutes in any hour.

Monitoring & Recordkeeping:

Opacity observations shall be conducted annually for each generator in accordance with 40 CFR 60, Appendix A, Method 9. A log of opacity determinations shall be maintained including all data required by 40 CFR 60, Appendix A, Method 9.

82. Maintenance firing of the *Moran Eye Center Phase II: Emergency Diesel Generators* shall not exceed 35 hours each per rolling 12-month period. Emergency generators shall be used for electricity production only during periods when electric power from the utilities is interrupted.

Monitoring and Recordkeeping:

Records shall be maintained for each generator including: dates of use, reason for use (maintenance, emergency, other), total hours of start-up maintenance usage, total hours of emergency usage, total hours of usage calculated with a 12-month rolling total by the twentieth day of each month using the previous twelve months data.

**Health Sciences Education Building**

83. Visible emission from the *Health Sciences Education Building: Emergency Diesel Generator* shall be no greater than 20 percent opacity except for operation not exceeding 3 minutes in any hour.

Monitoring & Recordkeeping:

Opacity observations shall be conducted annually in accordance with 40 CFR 60, Appendix A, Method 9. A log of opacity determinations shall be maintained including all data required by 40 CFR 60, Appendix A, Method 9.

84. Maintenance firing of the *Health Sciences Education Building: Emergency Diesel Generator* shall not exceed 35 hours per rolling 12-month period. Emergency generators shall be used for electricity production only during periods when electric power from the utilities is interrupted.

Monitoring and Recordkeeping:

Records shall be maintained including: dates of use, reason for use (maintenance, emergency, other), total hours of start-up maintenance usage, total hours of emergency usage, total hours of usage calculated with a 12-month rolling total by the twentieth day of each month using the previous twelve months data.

The Executive Secretary shall be notified in writing if the company is sold or changes its name.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the Division of Air Quality. The Utah Administrative Code R307 rules used by DAQ, the Notice of Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site:

[http://www.deq.state.ut.us/eqair/aq\\_home.htm](http://www.deq.state.ut.us/eqair/aq_home.htm)

The annual emission estimations below include point source emissions etc. and do not include fugitive emissions, fugitive dust, road dust, and tail pipe emissions. These emissions are for the purpose of determining the applicability of Prevention of Significant Deterioration, non-attainment area, maintenance area, and Title V source requirements of the R307. They are not to be used for determining compliance.

The Potential To Emit (PTE) emissions for this source are currently calculated at the following values:

<u>Pollutant</u>	<u>Tons/yr</u>
PM <sub>10</sub> .....	17.37
SO <sub>2</sub> .....	22.16
NO <sub>x</sub> .....	192.28
CO.....	166.80
VOC.....	12.47
Total HAPs .....	3.73

Approved By:

Richard W. Sprott, Executive Secretary  
Utah Air Quality Board