

Department of Environmental Quality

Kimberly D. Shelley Executive Director

DIVISION OF AIR QUALITY Bryce C. Bird *Director* 10354

Title V Operating Permit

PERMIT NUMBER: 3500063004 -DRAFT

DATE OF PERMIT: TBD Date of Last Revision: TBD

This Operating Permit is issued to, and applies to the following:

Name of Permittee:		Permitted Location:
University of Utah		
Building 605		University of Utah Facilitie
125 South Fort Dougla	ıs Blvd	200 S University Avenue
Salt Lake City, UT 84112		Salt Lake City, UT 84112
UTM coordinates: SIC code:		4,512,688 m Northing versities, & Professional Schools)
By:		Prepared By:
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ENFORCEABLE DATES AND TIMELINES

The following dates or timeframes are referenced in Section I: General Provisions of this permit.

Annual Certification Due: December 3, and on that date of every calendar year that this

permit is in force.

Renewal application due: TBD

Permit expiration date: TBD

Definition of "prompt": written notification within 14 days.

ABSTRACT

Emissions from the University of Utah are primarily due to the operation of: boilers, comfort heating equipment, and emergency generators.

Boilers located throughout the campus are covered by "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units" found in 40 CFR Part 60 Subpart Dc. Two large boilers located in Building 303 predate those regulations.

A cogeneration unit located Building 303 is subject to "Standards of Performance for Stationary Combustion Turbines" found in 40 CFR, Part 60, Subpart KKKK.

Some emergency generators located on campus are subject to "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines" found in 40 CFR Part 60, subpart IIII, or "Standards of Performance for Stationary Spark Ignition Internal Combustion Engines" found in 40 CFR Part 60, Subpart JJJJ, and the "National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" found in 40 CFR Part 63, Subpart ZZZZ.

A diesel fired back-up boiler located in the Rehabilitation Hospital is subject to "National Emission Standard for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Source" found in 40 CFR, Part 60, Subpart JJJJJJ.

An Ethylene Oxide Sterilizer located in the University Hospital is subject to "National Emission Standards for Hospital Ethylene Oxide Sterilizers" found in 40 CFR, Part 63, Subpart WWWWW.

For emission units subject to the subparts of 40 CFR Part 60, the general provisions of 40 CFR Part 60 Subpart A apply. For emission units subject to the subparts of 40 CFR Part 63, the general provisions of 40 CFR Part 63 Subpart A apply. The University of Utah is a major source of carbon monoxide (CO) and oxides of nitrogen (NO_x).

OPERATING PERMIT HISTORY

Permit/Activity	Date Issued	Recorded Changes
Title V renewal application (Project #OPP0103540020)	TBD	Renewal: Incorporates changes approved under AO DAQE-AN103540030-22, as well as the changes approved under the superseded AOs DAQE-AN103540026-19 and DAQE-AN103540028-21.
Title V renewal application (Project #OPP0103540019)	05/20/2015	
Title V administrative amendment - enhanced AO (Project #OPP0103540017)	04/30/2013	Additions: -Various administrative changes. -Incorporate changes to 40 CFR Part 63 subpart ZZZZ, and Part 60 subpart IIII. -Changes resulting from issuance of DAQE-AN103540024-13. -Replace 8.4 MMBtu/hr boiler (Building 853 Boiler) with two (2) 2 MMBtu/hr boilers. -Add another 13.5 MMBtu/hr boiler to Building 587. -Add Small Diesel Fired Emergency Generators to: buildings 112, 512, and 801. -Increase the combined capacity for Small Diesel Fired Emergency Generators from 7,144 hp, to 7,773 hp.
		-Increase the combined capacity for Large Diesel Fired Emergency Generators from 44,063 hp, to 47,250 hp. -Add the following generators subject to NSPS IIII and MACT ZZZZ: bldg 7 (197 hp); bldg 28 (42 hp); bldg 53 (103 hp), bldg 57 (232 hp); bldg 84 (162 hp); bldg 85 (1,848 hp); bldg 112 (232 hp); bldg 205 (42 hp); bldg 512 (103 hp); -Remove natural gas fired generator from building 500. -Change various natural gas limits on boilers to a site-wide limit of 1,624,680,000 Scf per rolling 12-month period.
Title V administrative amendment - enhanced AO (Project #OPP0103540018)	04/30/2013	Additions: -Remove Boiler #5 rated 105 MMBtu/hr, Building 303 -Add Boilers #5 and #6 each rated 50 MMBtu/hr, Building 303

		 -Increase the combined capacity of small generators to 9,835 hp. -Add small diesel fired emergency generators to buildings: 372, 587, 892, Ambulatory Center Parking Structure, Student Life Center, School of Dentistry, Beverly T. Sorenson Arts and Ed Center. -Add large diesel fired emergency generators to buildings: 85, 151, 521/525, 526, 555, 556,. -Add Ivor Thomas Lab Flash Iron-making including 3.78 MMBtu/hr Bench reactor system.
Title V administrative amendment - enhanced AO (Project #OPP0103540016)	01/25/2012	Additions: -Changes resulting from issuance of DAQE-AN103540023-11. -Replaced 22 hp emergency gasoline fired generator at Building 84 with a 160 hp diesel powered emergency generator. This generator is classified as "new" under 40 CFR ZZZZ, and subject to that regulation. -Added 697 hp diesel fired emergency generator resulting from purchase of building 865. -Added 10 MMBtu natural gas fired boiler resulting from purchase of building 865. -Added Federal Register published revisions to 40 CFR part 63, ZZZZ and 40 CFR part 60, IIII.
Title V administrative amendment - enhanced AO (Project #OPP0103540015)	08/29/2011	Additions: Changes resulting from issuance of DAQE-AN0103540022-11: Added 20.67 MMBtu/hr NG boiler subject to NSPS, 40 CFR 60, Subpart Dc. Located in building 151. Added the following emergency generators subject to 40 CFR Part 60, Subpart IIII, NSPS Stationary CI IC Engines: Three (3) 1,175 hp emergency generators to building 151. One (1) 34 hp diesel fired emergency generator in the North Chiller Plant (building 149)

One (1) 2,923 hp diesel fired emergency generator in the Skaggs Pharmacy (building 581)

One (1) 229 hp diesel fired emergency generator in the Emergency Operations Center (building 801)

One (1) 732 hp diesel fired emergency generator in the David Eccles School of Business (building 79)

Added notification requirement for the new equipment pursuant with R307-401-18.

Re-ordered the emissions unit list to match the AO

Combined Huntsman Cancer Institute - NSPS Boilers and Huntsman Cancer Institute - Small Boilers.

Removed the hours limit for the West Expansion Boilers.

Added Building 582 (School of Pharmacy Building) Natural gas fired boiler that is rated at 17.0 MMBtu/hr. The boiler is subject to NSPS, 40 CFR 60, Subpart Dc.

Renamed Diesel-Generators- each rated less than 600 Hp to Small Diesel Fired Emergency Generators. Changed the building numbers. Reduced combined capacity of the generators from 7,148 hp to 6,984 hp.

Renamed Diesel-Generators- each rated more than 600 Hp to Large Diesel Fired Emergency Generators. Changed the building numbers. Increased combined capacity of the generators from 33,621 hp to 43,366 hp.

Renamed Miscellaneous Natural Gas Fired Generators to Natural Gas Fired Emergency Generators.

Revised the sulfur limit for diesel burning equipment to reflect new low sulfur standards.

Added time restriction for maintenance checks and readiness testing on the new emergency generators located at the Sorenson Biotechnology Building 151 (USTAR)

Revised natural gas limits for Building 303 Boilers. Changes:

Added natural gas limit for Building 532 (University Hospital).

Added natural gas limit for Building 151 (USTAR).

Added natural gas limit for School of Pharmacy Building 582 emergency boiler.

		Added reviewer comment regarding GHG applicability.
Title V renewal application (Project #OPP0103540014)	07/07/2010	Changes: Addition of more specific requirements for emergency generators subject to 40 CFR part 60, subpart IIII and 40 CFR part 63, subpart ZZZZ.
Title V administrative amendment - enhanced AO (Project #OPP0103540011)	01/18/2010	Changes: Changes are being made from the replacement of AO DAQE-AN0103540019-08 with DAQE-AN0103540021-09.
		1Replacing the gasoline generator in Bldg 588 (nursing building) with a 399 hP diesel Generator.
		2 Adding one diesel emergency generator rated at 2,220 hP to Bldg 5 (Utah Museum of Natural History).
		3Replacing the 13.5 MM Btu boiler in Building 526 with a 25.2 MM Btu boiler (the new boiler will be located in building 532 of the Hospital West Expansion).
		4Revised building numbers.
Title V administrative amendment - enhanced AO (Project #OPP0103540009)	07/03/2008	Changes: Changes are being made from the replacement of AO DAQE-AN0103540016-07 to the new AO DAQE-AN0103540018-08.
		The changes involve the installation of four additional generators. They will be located in the Humanities bldg, North Medical Towers bldg 701, Research Park bldg 874, and School of Social Work bldg 26.
Title V administrative amendment - enhanced AO (Project #OPP0103540010)	07/03/2008	Changes: are being made from the replacement of AO DAQE-AN0103540018-08 and consolidation of DAQE-AN03540012-06 to the new AO DAQE-AN0103540019-08.
		1. One NSPS natural gas fired boiler rated at 25.2 MMBtu is being added with the University Hospital West Expansion.
		2. One diesel emergency generator rated at 78 hp is being added to building 892.
		3. Diesel generators have been organized into two groups: greater than 600 hp, and less than 600 hp.
		4. The number of University Hospital Ethylene Oxide Sterilizers has been corrected.

Title V administrative	03/05/2008	5. MACT requirement for reciprocating engines has been added (40 CFR part 63, subpart ZZZZ). 6. Review comment added regarding applicability of 40 CFR Part 63, Subpart HHHHHHH to the paint booth. Title V administrative amendment - enhanced AO (Project #OPP0103540009) 7/3/2008 Changes are being made from the replacement of AO DAQE-AN0103540016-07 to the new AO DAQE-AN0103540018-08. The changes involve the installation of four additional generators. They will be located in the Humanities bldg, North Medical Towers bldg 701, Research Park bldg 874, and School of Social Work bldg 26. Title V administrative amendment - enhanced AO (Project #OPP0103540008) 3/5/2008 Title V administrative amendment by source 12/17/2006 Various changes made as noted in the Engineering Review comments at the end of this modified permit.
amendment - enhanced AO (Project #OPP0103540008)		AN0354014-07 to the new AO DAQE-AN0103540016-07, are: Changes: 1. Add two natural gas fired boilers (Building 587) rated at up to 13.501 MMBtu/hr, each. 2. Add one natural gas fired boiler (Building 853) (Health Profession Education), rated at up to 8.369 MMBtu/hr. 3. Add one natural gas boiler (Building 523 Moran Eye Center), rated at up to 8.165 MMBtu/hr. 4. Add one natural gas boiler (Building 33 Rice Eccles Stadium), rated at up to 5.25 MMBtu/hr. 5. Add one diesel fired emergency backup generator (Building 1-Park Building), rated at 896 hp (668 kW). 6. Replaced two dual fueled boilers (natural gas and coal Boilers #1 and #2, at Building 303 High Temperature Water Plant (HTWP)) with one natural gas fired turbine (Solar's SoLoNox TM) with waste heat recovery unit (WHRU) coupled with a supplementary natural gas fired duct burner. Electrical power generated by cogeneration unit will be only used by U of U facilities. However, if in the future U of U supplies more than one third of the gas turbine potential electrical output capacity to any power distribution system for sale, the gas turbine will be considered as utility unit. 7. Removed references associated with coal use since the

		coal handling systems have been dismantled. 8. After the cogeneration unit becomes operational stack testing for High Temperature Water Plant boilers #3-#5 will not be required due to their limited use as backup units to the cogeneration unit. 9. Add Carpentry Shop Dust Collector in Building 350. 10. Add two diesel fired emergency backup generators, each rated at 1000 kW, for Building 526 (Hospital Central Plant). 11. Add one diesel fired emergency backup generator rated at 150 kW for Buildings 701 and 702 (Medical Towers). 12. Add one diesel fired emergency generator in Bldg 12 (Sutton Building) rated 670 bhp, 13. Add one small ethylene oxide sterilization unit with less than 1 ton of ethylene consumption, 14. Changed natural gas fired emergency backup generators combined total from 620 kW to 300 kW, AO Condition 8.D Deletions: 15. Changed 10 percent opacity limit to 20 percent for diesel fired emergency generators for Rice-Eccles Stadium and Student Housing; AO Conditions 39 and 40. 10 percent was inadvertently put instead of 20 opacity limit. 16. Removed one diesel fired emergency backup generator in Building 63 rated at 47 hp (35 kW). 17. Removed listing of miscellaneous boilers with heat rating up to 5 MMBtu/hr.
		18. Removed hourly limits for all emergency generators for maintenance operations. Limit for the emergency use for electricity production only during periods when electric power from the utilities is interrupted, remains.
Title V administrative amendment by source (Project #OPP0103540004)	10/26/2006	Changes: Various changes made as noted in the Engineering Review comments at the end of this modified permit.
Title V administrative amendment by source (Project #OPP0103540003)	09/17/2006	Changes: Addition of nine emergency back-up generators.
Title V administrative amendment by source (Project #OPP0103540002)	01/10/2005	Changes: Consolidation of Approval Orders, removal of redundant conditions, addition of new equipment, addition of facilities newly under University control, deletion of facilities no longer under University control, and to update requirements. Further details are included in the review comments at the end of this permit.

Title V initial application	12/03/2002	
(Project #OPP0103540001)		

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Issued under authority of Utah Code Ann. Section 19-2-104 and 19-2-109.1, and in accordance with Utah Administrative Code R307-415 Operating Permit Requirements.

All definitions, terms and abbreviations used in this permit conform to those used in Utah Administrative Code R307-101 and R307-415 (Rules), and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. Unless noted otherwise, references cited in the permit conditions refer to the Rules.

Where a permit condition in Section I, General Provisions, partially recites or summarizes an applicable rule, the full text of the applicable portion of the rule shall govern interpretations of the requirements of the rule. In the case of a conflict between the Rules and the permit terms and conditions of Section II, Special Provisions, the permit terms and conditions of Section II shall govern except as noted in Provision I.M, Permit Shield.

SECTION I: GENERAL PROVISIONS

I.A <u>Federal Enforcement.</u>

All terms and conditions in this permit, including those provisions designed to limit the potential to emit, are enforceable by the EPA and citizens under the Clean Air Act of 1990 (CAA) except those terms and conditions that are specifically designated as "State Requirements". (R307-415-6b)

I.B Permitted Activity(ies).

Except as provided in R307-415-7b(1), the permittee may not operate except in compliance with this permit. (See also Provision I.E, Application Shield)

I.C <u>Duty to Comply.</u>

- I.C.1 The permittee must comply with all conditions of the operating permit. Any permit noncompliance constitutes a violation of the Air Conservation Act and is grounds for any of the following: enforcement action; permit termination; revocation and reissuance; modification; or denial of a permit renewal application. (R307-415-6a(6)(a))
- I.C.2 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. (R307-415-6a(6)(b))
- I.C.3 The permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director copies of records required to be kept by this permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA along with a claim of confidentiality. (R307-415-6a(6)(e))
- I.C.4 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 shall not stay any permit condition, except as provided under R307-415-7f(1) for minor permit modifications. (R307-415-6a(6)(c))

I.D Permit Expiration and Renewal.

- I.D.1 This permit is issued for a fixed term of five years and expires on the date shown under "Enforceable Dates and Timelines" at the front of this permit. (R307-415-6a(2))
- I.D.2 Application for renewal of this permit is due on or before the date shown under "Enforceable Dates and Timelines" at the front of this permit. An application may be submitted early for any reason. (R307-415-5a(1)(c))
- I.D.3 An application for renewal submitted after the due date listed in I.D.2 above shall be accepted for processing, but shall not be considered a timely application and shall not relieve the permittee of any enforcement actions resulting from submitting a late application. (R307-415-5a(5))
- I.D.4 Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted consistent with R307-415-7b (see also Provision I.E, Application Shield) and R307-415-5a(1)(c) (see also Provision I.D.2). (R307-415-7c(2))

I.E **Application Shield.**

If the permittee submits a timely and complete application for renewal, the permittee's failure to have an operating permit will not be a violation of R307-415, until the Director takes final action on the permit renewal application. In such case, the terms and conditions of this permit shall remain in force until permit renewal or denial. This protection shall cease to apply if, subsequent to the completeness determination required pursuant to R307-415-7a(3), and as required by R307-415-5a(2), the applicant fails to submit by the deadline specified in writing by the Director any additional information identified as being needed to process the application. (R307-415-7b(2))

I.F Severability.

In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force. (R307-415-6a(5))

I.G **Permit Fee.**

- I.G.1 The permittee shall pay an annual emission fee to the Director consistent with R307-415-9. (R307-415-6a(7))
- I.G.2 The emission fee shall be due on October 1 of each calendar year or 45 days after the source receives notice of the amount of the fee, whichever is later. (R307-415-9(4)(a))

I.H No Property Rights.

This permit does not convey any property rights of any sort, or any exclusive privilege. (R307-415-6a(6)(d))

I.I Revision Exception.

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 this permit. (R307-415-6a(8))

I.J Inspection and Entry.

- I.J.1 Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director or an authorized representative to perform any of the following:
- I.J.1.a Enter upon the permittee's premises where the source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit. (R307-415-6c(2)(a))
- I.J.1.b Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit. (R307-415-6c(2)(b))
- I.J.1.c Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practice, or operation regulated or required under this permit. (R307-415-6c(2)(c))
- I.J.1.d Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements. (R307-415-6c(2)(d))
- I.J.2 Any claims of confidentiality made on the information obtained during an inspection shall be made pursuant to Utah Code Ann. Section 19-1-306. (R307-415-6c(2)(e))

I.K <u>Certification.</u>

Any application form, report, or compliance certification submitted pursuant to this permit shall contain certification as to its truth, accuracy, and completeness, by a responsible official as defined in R307-415-3. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R307-415-5d)

I.L Compliance Certification.

- I.L.1 Permittee shall submit to the Director an annual compliance certification, certifying compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall be submitted no later than the date shown under "Enforceable Dates and Timelines" at the front of this permit, and that date each year following until this permit expires. The certification shall include all the following (permittee may cross-reference this permit or previous reports): (R307-415-6c(5))
- I.L.1.a The identification of each term or condition of this permit that is the basis of the certification;
- I.L.1.b The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period. Such methods and other means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements in this permit. If necessary, the permittee also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information;
- I.L.1.c The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means

designated in Provision I.L.1.b. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred; and

I.L.1.d Such other facts as the Director may require to determine the compliance status.

The permittee shall also submit all compliance certifications to the EPA, Region VIII, at the following address or to such other address as may be required by the Director: (R307-415-6c(5)(d))

Environmental Protection Agency, Region VIII
Office of Enforcement, Compliance and Environmental Justice
(mail code 8ENF)
1595 Wynkoop Street
Denver, CO 80202-1129

I.M **Permit Shield.**

I.L.2

I.M.1.a

I.M.1.b

I.M.2.d

I.M.1 Compliance with the provisions of this permit shall be deemed compliance with any applicable requirements as of the date of this permit, provided that:

Such applicable requirements are included and are specifically identified in this permit, or (R307-415-6f(1)(a))

Those requirements not applicable to the source are specifically identified and listed in this permit. (R307-415-6f(1)(b))

I.M.2 Nothing in this permit shall alter or affect any of the following:

I.M.2.a The emergency provisions of Utah Code Ann. Section 19-1-202 and Section 19-2-112, and the provisions of the CAA Section 303. (R307-415-6f(3)(a))

I.M.2.b The liability of the owner or operator of the source for any violation of applicable requirements under Utah Code Ann. Section 19-2-107(2)(a)(xiii) and Section 19-2-110 prior to or at the time of issuance of this permit. (R307-415-6f(3)(b)). [R307-415-6f]

I.M.2.c The applicable requirements of the Acid Rain Program, consistent with the CAA Section 408(a). (R307-415-6f(3)(c))

The ability of the Director to obtain information from the source under Utah Code Ann. Section 19-2-120, and the ability of the EPA to obtain information from the source under the CAA Section 114. (R307-415-6f(3)(d))

I.N Emergency Provision.

I.N.1 An "emergency" is 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 this 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 preventive maintenance, careless or improper operation, or operator error. (R307-415-6g(1))

I.N.2 An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the affirmative defense is demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

I.N.2.a An emergency occurred and the permittee can identify the causes of the emergency. (R307-415-6g(3)(a))

I.N.2.b The permitted facility was at the time being properly operated. (R307-415-6g(3)(b))

I.N.2.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 this permit. (R307-415-6g(3)(c))

The permittee submitted notice of the emergency to the Director within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirement of Provision I.S.2.c below. (R307-415-6g(3)(d))

I.N.3 In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. (R307-415-6g(4))

I.N.4 This emergency provision is in addition to any emergency or upset provision contained in any other section of this permit. (R307-415-6g(5))

I.O **Operational Flexibility.**

I.N.2.d

Operational flexibility is governed by R307-415-7d(1).

I.P Off-permit Changes.

Off-permit changes are governed by R307-415-7d(2).

I.Q Administrative Permit Amendments.

Administrative permit amendments are governed by R307-415-7e.

I.R **Permit Modifications.**

Permit modifications are governed by R307-415-7f.

I.S Records and Reporting.

I.S.1 Records.

I.S.1.a The records of all required monitoring data and support information shall be retained by the permittee for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-charts or

	appropriate recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. (R307-415-6a(3)(b)(ii))
I.S.1.b	For all monitoring requirements described in Section II, Special Provisions, the source shall record the following information, where applicable: (R307-415-6a(3)(b)(i))
I.S.1.b.1	The date, place as defined in this permit, and time of sampling or measurement.
I.S.1.b.2	The date analyses were performed.
I.S.1.b.3	The company or entity that performed the analyses.
I.S.1.b.4	The analytical techniques or methods used.
I.S.1.b.5	The results of such analyses.
I.S.1.b.6	The operating conditions as existing at the time of sampling or measurement.
I.S.1.c	Additional record keeping requirements, if any, are described in Section II, Special Provisions.
I.S.2	Reports.
I.S.2.a	Monitoring reports shall be submitted to the Director every six months, or more frequently if specified in Section II. All instances of deviation from permit requirements shall be clearly identified in the reports. (R307-415-6a(3)(c)(i))
I.S.2.b	All reports submitted pursuant to Provision I.S.2.a shall be certified by a responsible official in accordance with Provision I.K of this permit. (R307-415-6a(3)(c)(i)
I.S.2.c	The Director shall be notified promptly of any deviations from permit requirements including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventative measures taken. Prompt, as used in this condition, shall be defined as written notification within the number of days shown under "Enforceable Dates and Timelines" at the front of this permit. Deviations from permit requirements due to breakdowns shall be reported in accordance with the provisions of R307-107. (R307-415-6a(3)(c)(ii))
I.S.3	Notification Addresses.
I.S.3.a	All reports, notifications, or other submissions required by this permit to be submitted to the Director are to be sent to the following address or to such other address as may be required by the Director:
	Utah Division of Air Quality P.O. Box 144820 Salt Lake City, UT 84114-4820 Phone: 801-536-4000

I.S.3.b

I.T.1.b

I.T.1.c

I.T.1.d

All reports, notifications or other submissions required by this permit to be submitted to the EPA should be sent to one of the following addresses or to such other address as may be required by the Director:

For annual compliance certifications:

Environmental Protection Agency, Region VIII
Office of Enforcement, Compliance and Environmental Justice
(mail code 8ENF)
1595 Wynkoop Street
Denver, CO 80202-1129

For reports, notifications, or other correspondence related to permit modifications, applications, etc.:

Environmental Protection Agency, Region VIII Air Permit and Monitoring Branch (mail code 8ARDP-PM) 1595 Wynkoop Street Denver, CO 80202-1129 Phone: 303-312-6927

I.T Reopening for Cause.

I.T.1 A permit shall be reopened and revised under any of the following circumstances:

I.T.1.a New applicable requirements become applicable to the permittee and there is a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the terms and conditions of this permit have been extended pursuant to R307-415-7c(3), application shield. (R307-415-7g(1)(a))

The Director or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. (R307-415-7g(1)(c))

EPA or the Director determines that this permit must be revised or revoked to assure compliance with applicable requirements. (R307-415-7g(1)(d))

Additional applicable requirements are to become effective before the renewal date of this permit and are in conflict with existing permit conditions. (R307-415-7g(1)(e))

I.T.2 Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the Acid Rain Program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into this permit. (R307-415-7g(1)(b))

I.T.3 Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. (R307-415-7g(2))

I.U <u>Inventory Requirements.</u>

An emission inventory shall be submitted in accordance with the procedures of R307-150, Emission Inventories. (R307-150)

I.V <u>Title IV and Other, More Stringent Requirements</u>

Where an applicable requirement is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, Acid Deposition Control, both provisions shall be incorporated into this permit. (R307-415-6a(1)(b))

SECTION II: SPECIAL PROVISIONS

II.A Emission Unit(s) Permitted to Discharge Air Contaminants.

(R307-415-4(3)(a) and R307-415-4(4))

II.A.1 Permitted source

(Source-wide)

II.A.2 **Building 302 UCHWTP Boilers**

Three boilers #1, #3, and #4 (NSPS Dc). These boilers all have 15% flue gas recirculation, and are fired on natural gas and diesel as a backup fuel. Rating for each boiler is up to 87.5 MMBtu/hr.

II.A.3 **Building 303 LCHWTP Boilers**

Two NSPS Dc Boilers (6 & 7) that use natural gas, with FGR and ultra-low NO_x burners, each rated up to 50 MMBtu/hr. One NSPS Dc Boiler #9 that use natural gas rated at 72 MMBTU/hr, with ultra-low NO_x burners (9 ppmvd)

II.A.4 Building 303 LCHWTP Cogeneration Unit

One natural gas fired Solar Taurus 70 T7800S (Solar's SoLoNox TM) turbine with one WHRU with duct burner rated at 85 MMBtu/hr. Natural gas turbine is site rated at 7.23 MW with heat input of 72.78 MMBtu/hr. Gas turbine and duct burner are Subject to NSPS, 40 CFR, Part 60, Subpart KKKK.

II.A.5 Ambulatory Care Complex Boilers

Boilers use natural gas as a primary fuel and diesel as a backup fuel, low NO_x burner (30 ppmvd) which include:

Five 10 MMBtu/hr (each) boilers (NSPS Dc),

Two 5 MMBtu/hr (each) boilers,

Three 12 MMBtu/hr (each) boilers (NSPS Dc).

II.A.6 Rehabilitation Hospital Backup Boiler

One 4.3 MMBtu/hr, low-NO_x Burner (30 ppmvd), diesel fired, MACT Subpart JJJJJJ

II.A.7 University Hospital Boilers

Boilers use natural gas as a primary fuel and diesel as a back fuel, which include:

Building 521 (Unit 1) 10.5 MMBtu/hr, Pre-NSPS,

Building 521 (Unit 2) 10.5 MMBtu/hr, Pre-NSPS,

Building 526, out of service, listed for information purpose,

Building 532 (Unit 1) 25.2 MMBtu/hr, NSPS Dc,

Building 532 (Unit 2) 25.2 MMBtu/hr, NSPS Dc.

II.A.8 Huntsman Boilers

Boilers use natural gas as primary fuel and diesel as a back fuel, which include:

Building 554, 8.7 MMBtu/hr, Pre-NSPS

Building 555 (Unit 1 and 2), 16.8 MMBtu/hr, NSPS Dc

Building 555, (Unit 3 and 4), 5 MMBtu/hr

Building 556 (Unit 1 and 2), 6 MMBtu/hr, NSPS Dc

II.A.9 Miscellaneous Primary Boilers

Natural gas fired boilers which include:

Building 33, 5.25 MMBtu/hr,

Building 306, 8 MMBtu/hr,

Building 587 (Unit 1 and 2), 10.7 MMBtu/hr, NSPS Dc,

Building 701-2 (Unit 1 and 2), 5.5 MMBtu/hr, Building 865, 10 MMBtu/hr, NSPS Dc

II.A.10 Miscellaneous Backup Boilers

Natural gas fired boilers which include

Building 151 (Sorenson Biotechnology), 20.67 MMBtu/hr, NSPS Dc,

Building 523, 8.2 MMBtu/hr,

Building 565, 19 MMBtu/hr, NSPS Dc,

Building 581, 17 MMBtu/hr, NSPS Dc

II.A.11 Miscellaneous Small Boilers

Natural gas boilers with maximum rated capacity less than 5.0 MMBtu/hr each which include:

Building 32 (four boilers),

Building 853 boiler.

II.A.12 Small Diesel Fired Emergency Generators (<600 hp)

Buildings 1, 4, 7, 13, 14, 19, 25, 26, 28, 35, 49, 53, 57, 64, 66, 82, 84 (x2), 95, 112, 149, 197, 205, 210, 212, 213, 301, 305, 347, 372, 500, 512, 523, 540, 575, 585, 587, 588, 701, 702, 801, 815, 821, 851 (x2), 853, 874, 876, 887, 892 (x2), ACC parking (Bldg. 369), Student Life Center (Bldg.110), School of Dentistry (Bldg.841), and Beverly T. Sorenson Arts & Ed Center (Bldg.71), Lassonde (Bldg.46), HSC Park, Sutton Park (Bldg.41), Field House (Bldg.29), and Business Loop Parking (Bldg. 69)

II.A.13 Large Diesel Fired Emergency Generators (>600 hp)

Buildings, 12, 32, 40, 45, 48, 62, 74, 79, 85 (x2), 86, 151 (x3), 179, 302, 303, 521/525 (x2), 523, 526 (x5), 533, 550, 555 (x2), 556 (x2), 565, 570, 581, 587, 865, 872, 888, ACC Building (x3) (Bldg. 5100), HCI Phase 4 (Bldg. 554) and Crocker (Bldg. 5).

II.A.14 Generators subject to NSPS IIII and MACT ZZZZ.

These generators are identified later in this permit along with their specific requirements from NSPS IIII and MACT ZZZZ.

II.A.15 Natural Gas Fired Emergency Generators

Natural gas-fired generators located at Buildings 64 (100 kW), 67 (300 kW), 350 (300 kW), and 685 (300 kW). NSPS Subpart JJJJ

II.A.16 **Building 350 Paint Booth**

The paint booth located in Building 350.

II.A.17 **Building 350 Carpentry Shop Dust Collector**

One 12,000 cfm dust collector.

II.A.18 University Hospital Ethylene Oxide Sterilizer

One small sterilization unit using less than 1 ton of ethylene oxide a year (each). Units must comply with the emission standards of 40 CFR 63 Subpart WWWWW (National Emission Standards for Hospital Ethylene Oxide Sterilizers).

II.A.19 Underground Fuel Storage Tanks

University Hospital: One Diesel tank approximately 12,000 gallons, one diesel tank approximately 35,000 gallons, and one jet fuel tank approximately 10,000 gallons.

UCHTWP: Three Diesel tanks approximately 25,000 gallons each.

Huntsman Cancer Center: Two Diesel tanks approximately 12,000 gallons each.

No unit specific requirements.

II.A.20 Small Fuel Storage Tanks

Various fuel tanks located throughout the campus that have no federal applicable requirements; each tank has a storage capacity of 10,000 gallons or less. No unit-specific applicable requirements (listed for identification purposes only).

II.A.21 Misc. Parts Washers (subject to R307-335-2)

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.

II.A.22 Olympic Cauldron

This is a seldom used ornamental monument from the Salt Lake 2002 Olympics (listed for identification purposes only). No unit-specific applicable requirements.

II.A.23 Fume Hoods

Fume hoods located in various labs throughout the campus (listed for identification purposes only). No unit-specific applicable requirements.

II.B Requirements and Limitations

The following emission limitations, standards, and operational limitations apply to the permitted facility as indicated:

II.B.1 Conditions on permitted source (Source-wide).

II.B.1.a **Condition:**

The permittee shall comply with the applicable requirements for servicing of motor vehicle air conditioners pursuant to 40 CFR 82, Subpart B - Servicing of Motor Vehicle Air Conditioners. [Authority granted under 40 CFR 82.30(b); condition originated in 40 CFR 82 Subpart B].

II.B.1.a.1 **Monitoring:**

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 82, Subpart B.

II.B.1.a.2 **Recordkeeping:**

All records required in 40 CFR 82, Subpart B shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

II.B.1.a.3 **Reporting:**

All reports required in 40 CFR 82, Subpart B shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

II.B.1.b Condition:

The permittee shall comply with the applicable requirements for recycling and emission reduction for class I and class II refrigerants pursuant to 40 CFR 82, Subpart F - Recycling and Emissions Reduction. [Authority granted under 40 CFR 82.150(b); condition originated in 40 CFR 82 Subpart F].

II.B.1.b.1 **Monitoring:**

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 82, Subpart F.

II.B.1.b.2 **Recordkeeping:**

All records required in 40 CFR 82, Subpart F shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

II.B.1.b.3 **Reporting:**

All reports required in 40 CFR 82, Subpart F shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

II.B.1.c Condition:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected emission unit, 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. [Authority granted under AO DAQE-AN103540030-22, 40 CFR 60.11(d), 40 CFR 63.6(e)]. [40 CFR 60 Subpart A, 40 CFR 63 Subpart A, R307-401-8(2)]

II.B.1.c.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.1.c.2 **Recordkeeping:**

Permittee shall document activities performed to assure proper operation and maintenance. Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.1.c.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.d **Condition:**

The permittee shall notify the Director in writing when the following equipment has been installed:

Emergency Generator: Building 888, one 755 hp diesel-fired

Natural Gas Fired Boilers: Building 303 (x1) 72 MMBtu/hr (Boiler 9), Building 32 (x4), < 5 MMBtu/hr each, Building 586 (x2), 10.7 MMBtu/hr each,

Huntsman Cancer Center Building 554 (x1) 8.7 MMBtu/hr, Building 306 (x1) 8.0 MMBtu/hr, Building 701/702 (x2), 5.5 MMBtu/hr each

Miscellaneous small natural gas-fired boilers.

Diesel Fired Boiler: Rehabilitation Hospital 4.3 MMBtu/hr.

If construction and/or installation have not been completed by June 22, 2024, the Director shall be notified in writing on the status of the construction and/or installation. At that time, the Director shall require documentation of the continuous construction and/or installation of the operation and may revoke the underlying AO DAQE-AN103540030-22.

[AO DAQE-AN103540030-22]. [R307-401-18]

II.B.1.d.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.1.d.2 **Recordkeeping:**

Records of the above referenced notices shall be maintained.

II.B.1.d.3 **Reporting:**

To ensure proper credit when notifying the Director, send your correspondence to the Director, attn: Compliance Section.

II.B.1.e **Condition:**

The permittee shall only use diesel fuel (fuel oil #1, #2 or diesel fuel oil additives) in all equipment permitted for diesel/fuel oil combustion. All diesel burned shall meet the definition of ultra-low sulfur diesel (ULSD) and contain no more than 15 ppm sulfur.

[DAQE-AN103540030-22]. [R307-401-8]

II.B.1.e.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.1.e.2 **Recordkeeping:**

To demonstrate compliance, fuel records shall be kept for all periods when the facility is in operation indicating that the diesel fuel meets the ULSD requirements, or the permittee shall obtain certification of sulfur content from the fuel supplier.

II.B.1.e.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.f Condition:

The permittee shall not exceed 1,910 MMScf natural gas consumption per rolling 12-month period for all natural gas fired boilers (except UCHTWP Boilers) heat rated at 5.0 MMBtu/hr or greater and all other natural gas-fired equipment.

[DAQE-AN103540030-22]. [R307-401-8]

II.B.1.f.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.1.f.2 **Recordkeeping:**

To demonstrate compliance with the natural gas consumption limits, the permittee shall maintain the following records:

- (A). For a rolling 12-month total, no later than 20 days after the end of each month, a new 12-month total shall be calculated using data from the previous 12 months.
- (B) Monthly calculations shall be based on natural gas fuel purchasing records or flow meters.
- (C) The records of consumption shall be kept on a monthly basis for all periods when the facility is in operation.

II.B.1.f.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.g Condition:

Unless otherwise specified in this permit, the permittee shall use only natural gas as fuel in all boilers rated at 5.0 MMBtu/hr or greater.

[DAQE-AN103540030-22]. [R307-401-8]

II.B.1.g.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.1.g.2 **Recordkeeping:**

To demonstrate compliance, fuel records shall be kept for all periods when a boiler is operating.

II.B.1.g.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.h **Condition:**

Fugitive emissions from any source associated with the source or with the control facilities shall not exceed 15% opacity. [R307-309-4]. [R307-309-4]

II.B.1.h.1 **Monitoring:**

A visual opacity survey of each affected emission unit shall be performed on a monthly basis, unless otherwise specified in this permit, by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as acceptable to the Director. If visible emissions other than condensed water vapor are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as

acceptable to the Director, for point sources, and in accordance 40 CFR 51, Appendix M, Method 203A for fugitive sources.

II.B.1.h.2 **Recordkeeping:**

A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is indicated, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9 or 40 CFR 51, Appendix M, Method 203A, or other EPA-approved testing method, as acceptable to the Director, shall also be maintained in accordance with Provision I.S.1 of this permit.

II.B.1.h.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.i Condition:

Visible emissions caused by fugitive dust shall not exceed 10% at the property boundary, and 20% onsite. Opacity shall not apply when the wind speed exceeds 25 miles per hour if the permittee has implemented, and continues to implement, the accepted fugitive dust control plan and administer at least one of the following contingency measures:

- (1) Pre-event watering
- (2) Hourly watering
- (3) Additional chemical stabilization
- (4) Cease or reduce fugitive dust producing operations
- (5) Other contingency measure approved by the Director

[R307-309-5, R307-309-6]. [R307-309]

II.B.1.i.1 **Monitoring:**

In lieu of monitoring via visible emissions observations, adherence to the current fugitive dust control plan approved by the Director shall be monitored to demonstrate that appropriate measures are being taken to control fugitive dust. Wind speed may be measured by a hand-held anemometer or equivalent device.

II.B.1.i.2 **Recordkeeping:**

If wind speeds are measured to establish an exception from the above visible emissions limits, records of the administered contingency measures and the wind speed measurements shall be maintained. Records required by the most recently approved fugitive dust control plan shall be maintained in accordance with the plan.

Records that demonstrate compliance with this condition shall be available to the Director upon request. [R307-309-12]

Records shall be maintained as described in provision I.S.1 of this permit.

II.B.1.i.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.j Condition:

- 1. Except as provided in R307-361-4, the permittee shall not supply or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table 1 in R307-361-5
- 2. If a coating is recommended for use in more than one of the specialty coating categories listed in Table 1 in R307-361-5, the most restrictive (lowest) VOC content limit shall apply.
- a. This requirement applies to usage recommendations that appear anywhere on the coating container, anywhere on any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on their behalf.
- b. Paragraph 2 (R307-361-5(2)) does not apply to the following coating categories:
- (i) Aluminum roof coatings
- (ii) Bituminous roof primers
- (iii) High temperature coatings
- (iv) Industrial maintenance coatings
- (v) Low-solids coatings
- (vi) Metallic pigmented coatings
- (vii) Pretreatment wash primers
- (viii) Shellacs
- (ix) Specialty primers, sealers and undercoaters
- (x) Wood Coatings
- (xi) Wood preservatives
- (xii) Zinc-rich primers
- (xiii) Calcimine recoaters
- (xiv) Impacted immersion coatings
- (xv) Nuclear coatings
- (xvi) Thermoplastic rubber coatings and mastic
- (xvii) Concrete surface retarders
- (xviii) Conversion varnish
- 3. Sell-through of coatings. A coating manufactured prior to January 1, 2015, may be supplied for up to three years after January 1, 2015. A coating manufactured before January 1, 2015, may be applied at any time. Paragraph 3 does not apply to any coating that does not display the date or date code required by R307-361-6(1)(a).
- 4. Painting practices. All architectural coating containers used when applying the contents therein to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These architectural coating containers include, but are not limited to, drums, buckets, cans, pails, trays or other application containers. Containers of any VOC-containing materials used for thinning and cleanup shall also be closed when not in use.
- 5. Thinning. The permittee shall not apply or solicit the application of any architectural coating that is thinned to exceed the applicable VOC limit specified in Table 1 in R307-361-5.
- 6. Rust preventative coatings. The permittee shall not apply or solicit the application of any rust preventative coating manufactured before January 1, 2015 for industrial use, unless such a rust preventative coating complies with the industrial maintenance coating VOC limit specified in Table 1 in R307-361-5.
- 7. Coatings not listed in Table 1 in R307-361-5. For any coating that does not meet any of the definitions for the specialty coatings categories listed in Table 1 of R307-361-5, the VOC content limit shall be determined by classifying the coating as a flat, non-flat, or non-flat/high gloss coating, based on its gloss, as defined in R307-361-3 and the corresponding flat, non-flat, or non-flat/high gloss coating VOC limit in Table 1 in R307-361-5 shall apply.
- 8. The following coatings are exempt from the requirements of this condition (R307-361).
- a. Any architectural coating that is supplied, sold, offered for sale, or manufactured for use outside of the counties in R307-361-2 or for shipment to other manufacturers for reformulation or repackaging.
- b. Any aerosol coating product.
- c. Any architectural coating that is sold in a container with a volume of one liter (1.057 quarts) or

less, including kits containing containers of different colors, types or categories of coatings and two component products and including multiple containers of one liter or less that are packaged and shipped together with no intent or requirement to ultimately be sold as one unit.

- (i) The exemption in paragraph 8.c (R307-361-4(3)) does not include bundling of containers one liter or less, which are sold together as a unit with the intent or requirement that they be combined into one container.
- (ii) The exemption in paragraph 8.c (R307-361-4(3)) does not include packaging from which the coating cannot be applied. This exemption does include multiple containers of one liter or less that are packaged and shipped together with no intent or requirement to ultimately sell as one unit.
- 9. The requirements of Table 1 do not apply to operations that are exclusively covered by Department of Defense military technical data and performed by a Department of Defense contractor and/or on site at installations owned and/or operated by the United States Armed Forces.

 [Origin: R307-361]. [R307-361]

II.B.1.j.1 **Monitoring:**

The permittee shall use the following test methods.

- (a) Determination of VOC content.
- (i) For the purpose of determining compliance with the VOC content limits in Table 1, the VOC content of a coating shall be calculated by following the appropriate formula found in the definitions of VOC actual, VOC content, and VOC regulatory found in R307-361-3.
- (ii) The VOC content of a tint base shall be determined without colorant that is added after the tint base is manufactured.
- (iii) If the manufacturer does not recommend thinning, the VOC content shall be calculated for the product as supplied.
- (iv) If the manufacturer recommends thinning, the VOC content shall be calculated including the maximum amount of thinning solvent recommended by the manufacturer.
- (v) If the coating is a multi-component product, the VOC content shall be calculated as mixed or catalyzed.
- (vi) If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOC during the curing process, the VOC content shall include the VOCs emitted during curing.

II.B.1.j.2 Recordkeeping:

Records demonstrating compliance with this condition shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.1.j.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2 Conditions on Building 302 UCHTWP Boilers

II.B.2.a Condition:

Visible emissions from each boiler shall be no greater than 10 percent opacity when the natural gas is combusted and shall be no greater than 20 percent opacity when the diesel is combusted. [DAQE-AN103540030-22]. [R307-401-8]

II.B.2.a.1 **Monitoring:**

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.

II.B.2.a.2 **Recordkeeping:**

Fuel records shall be maintained for demonstration of compliance with the opacity limitation during periods of natural gas usage.

For periods of fuel oil combustion, when an opacity observation or determination is required, a log of the results shall be maintained including all data required by 40 CFR 60, Appendix A, Method 9.

II.B.2.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2.b **Condition:**

The permittee shall keep monthly records of the amounts of each fuel combusted, for each affected emission unit. [40 CFR 60.48c(g)]. [40 CFR 60 Subpart Dc]

II.B.2.b.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.2.b.2 **Recordkeeping:**

Records of the amounts of each fuel combusted during each month for each affected unit shall be maintained as described in Provision I.S.1 of this permit.

II.B.2.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2.c Condition:

The permittee shall comply with all applicable requirements of 40 CFR 60 Subpart A.

[Authority granted under 40 CFR 60 Subpart A]. [40 CFR 60 Subpart A]

II.B.2.c.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.2.c.2 **Recordkeeping:**

All applicable records and notifications required by 40 CFR 60 Subpart A shall be maintained in accordance with provision I.S.1 of this permit.

II.B.2.c.3 **Reporting:**

The permittee shall comply with the reporting requirements in Section I of this permit and any additional reporting and notification requirements of 40 CFR 60 Subpart A.

II.B.2.d **Condition:**

The permittee shall use only natural gas as a primary fuel and use only diesel as a backup fuel. The permittee shall operate all dual fuel boilers according to the following operational requirements:

- (1) The permittee shall limit diesel fuel usage in all dual fuel boilers to 48 hours each per rolling 12-month period for periodic testing, maintenance, or operator training;
- (2) The permittee shall only use diesel fuel for periodic testing, maintenance, or operator training between March 1 and October 31;
- (3) There is no time limit on the use of diesel fuel in the dual fuel boilers during periods of natural gas curtailment, gas supply interruption, or startups.

[DAQE-AN103540030-22.]. [R307-401-8]

II.B.2.d.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.2.d.2 **Recordkeeping:**

To demonstrate compliance, fuel records shall be kept for all periods when a boiler combusts a fuel other than natural gas. Records documenting diesel fuel usage in each dual-fuel boiler shall be kept in a log and shall include the date that diesel fuel is used, the duration of operation in hours, and the reason for diesel fuel usage.

All the records shall be maintained in accordance with provision I.S.1 of this permit.

II.B.2.d.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2.e Condition:

The permittee shall not exceed 530 MMscf natural gas consumption per calendar year in all boilers combined at UCHTWP.

[DAQE-AN103540030-22 and SIP Section IX, Part H.12.p.iv]. [R307-110-17, R307-401-8]

II.B.2.e.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.2.e.2 **Recordkeeping:**

To demonstrate compliance with the natural gas consumption limits, a total shall be calculated no later than January 20 of each year using data from the previous calendar year. The records of consumption shall be kept for all periods when the facility is in operation.

II.B.2.e.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.3 Conditions on Building 303 LCHTWP Boilers

II.B.3.a **Condition:**

Emissions of NO_x from each of Building 303 LCHTWP Boilers 6 & 7 shall not exceed 0.54 lb/hr and 9.0 ppmdv (3% O₂ dry).

Emissions of NO_x from Building 303 LCHTWP Boilers 9 shall not exceed 0.79 lb/hr and 9.0 ppmdv (3% O₂ dry).

[DAQE-AN103540030-22 and SIP Section IX.H.2.l.(i)]. [R307-110-17, R307-401-8]

II.B.3.a.1 **Monitoring:**

- (A) Stacking testing shall be performed as follows:
- (a) Stack testing frequency: at least every 3 years based on the date of the last stack test.
- (b). Notification: Notification of the date, time, place of test and a copy of the test protocol shall be provided at least 30 days prior to the test. A pretest conference shall be held if directed by the Director.
- (c) Sample location: 40 CFR 60, Appendix A, Method 1. 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 Director. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (d) Volumetric flow rate: 40 CFR 60, Appendix A, Method 2 or other testing methods approved by the Director.
- (e) Stack testing methods: NO_x: 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D or 7E or other testing methods approved by the Director.
- (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 Director to give the results in the specified units of the emission limitation.
- (g) Heat input capacity during testing: The heat input capacity during testing shall be no less than 90% of the maximum heat input capacity achieved in the previous three (3) years.

- (B) During the years when stack testing is not performed, the permittee shall conduct annual screening with a portable monitor in accordance with the following requirements:
- (a) Screening with the portable monitor shall be performed in accordance with the portable manufacturer's specifications.
- (b) If screening with the portable monitor indicates a potential exceedance of the concentration limit, the permittee shall conduct a compliance test in accordance with the above stack testing terms within 90 days of that screening.

II.B.3.a.2 **Recordkeeping:**

The permittee shall maintain records that indicate the date, time, and results of each screening and demonstrate the portable monitor was operated in accordance with manufacturer's specification. Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.3.a.3 **Reporting:**

The results of stack testing and portable testing shall be submitted to the Director 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.

II.B.3.b **Condition:**

Visible emissions from each boiler shall be no greater than 10 percent opacity.

[DAQE-AN103540030-22]. [R307-401-8]

II.B.3.b.1 **Monitoring:**

Natural gas usage shall be verified in lieu of monitoring via visible emissions observations.

II.B.3.b.2 **Recordkeeping:**

Records of fuel usage shall be maintained to document periods during which natural gas has been burned.

II.B.3.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.3.c Condition:

The permittee shall keep monthly records of the amounts of fuel combusted. [40 CFR 60.48c(g)]. [40 CFR 60 Subpart Dc]

II.B.3.c.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.3.c.2 **Recordkeeping:**

Records of the amounts of each fuel combusted during each month for each affected unit shall be maintained as described in Provision I.S.1 of this permit.

II.B.3.c.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.3.d **Condition:**

The permittee shall comply with all applicable requirements of 40 CFR 60 Subpart A.

[40 CFR 60 Subpart A]. [40 CFR 60 Subpart A]

II.B.3.d.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.3.d.2 **Recordkeeping:**

All applicable records and notifications required by 40 CFR 60 Subpart A shall be maintained in accordance with provision I.S.1 of this permit.

II.B.3.d.3 **Reporting:**

The permittee shall comply with the reporting requirements in Section I of this permit and any additional reporting and notification requirements of 40 CFR 60 Subpart A.

II.B.4 Conditions on Building 303 LCHWTP Cogeneration Unit

II.B.4.a Condition:

Emissions from the Natural gas turbine and the WHRU duct burner shall not exceed the following:

- A. Natural gas turbine only: NO_x 2.65 lb/hr and 9 ppmdv (15% O₂ dry) per 3-test run average.
- B. Natural gas turbine only: CO 4.48 lb/hr and 25 ppmdv (15% O₂ dry) per 3-test run average.
- C. Natural gas turbine and WHRU duct burner: NO_x 8.97 lb/hr and 15 ppmdv (15% O_2 dry) per 3-test run average.
- D. Natural gas turbine and WHRU duct burner: CO $\,$ 10.84 lb/hr and 30 ppmdv (15% $\,$ O $_2$ dry) per 3-test run average.

[DAQE-AN103540025-13 and SIP Section IX.H.2.l.(i)]. [40 CFR 60 Subpart KKKK, R307-110-17, R307-401-8]

II.B.4.a.1 **Monitoring:**

A. Stack testing frequency for gas turbine alone and for gas turbine and WHRU duct burner combined: annually between the dates December 1 and February 29. The Director may require testing at any time.

- B. Notification: Notification of the date, time, place of test and a copy of the test protocol shall be provided at least 30 days prior to the test. A pretest conference shall be held if directed by the Director.
- C. Sample location: 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.
- D. Volumetric flow rate: 40 CFR 60, Appendix A, Method 2 or other testing methods approved by the Executive Secretary.
- E. Stack testing methods for Nitrogen Oxides (NO_x): 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D or 7E or other testing methods approved by the Executive Secretary.
- F. Stack testing methods for carbon monoxide (CO): 40 CFR 60, Appendix A, Method 10, or other testing methods approved by the Executive Secretary
- G. 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 Director to give the results in the specified units of the emission limitation.
- H. Heat input capacity during testing: The heat input capacity during testing shall be no less than 90% of the maximum heat input capacity achieved in the previous three (3) years.

II.B.4.a.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.4.a.3 **Reporting:**

The results of stack testing shall be submitted to the Director 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.

II.B.4.b **Condition:**

Visible emissions shall be no greater than 10 percent opacity.

[DAQE-AN103540030-22]. [R307-401-8]

II.B.4.b.1 **Monitoring:**

Recordkeeping shall serve as monitoring.

II.B.4.b.2 **Recordkeeping:**

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

II.B.4.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.4.c Condition:

The turbine and duct burner shall burn natural gas which contains 20 grains of sulfur or less per 100 standard cubic feet and has potential sulfur emissions of less than less than 26 ng SO_2/J (0.060 lb $SO_2/MMBtu$) heat input

[40 CFR Part 60.4330(a)(2) and 60.4365(a)]. [40 CFR 60 Subpart KKKK]

II.B.4.c.1 **Monitoring:**

Recordkeeping for this permit condition shall serve as monitoring.

II.B.4.c.2 **Recordkeeping:**

The permittee shall demonstrate compliance by maintaining records specifying the maximum total sulfur content for natural gas combusted. Acceptable records include: valid contracts, tariff sheets or transportation contracts for the fuel. [40 CFR 60.4365(a)].

II.B.4.c.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.4.d **Condition:**

For the turbine and duct burner, the permittee shall comply with all applicable requirements of 40 CFR 60, Subpart A: General Provisions.

[40 CFR Part 60 Subpart A]. [40 CFR 60 Subpart A]

II.B.4.d.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.4.d.2 **Recordkeeping:**

All applicable records and notifications required by 40 CFR 60 Subpart A shall be maintained in accordance with provision I.S.1 of this permit.

II.B.4.d.3 **Reporting:**

The permittee shall comply with the reporting requirements in Section I of this permit and any additional reporting and notification requirements of 40 CFR 60 Subpart A.

II.B.4.e Condition:

The hours of operation shall not exceed 5,840 hour per rolling 12-month period for the WHRU duct burner.

[AO DAQE-103540030-22]. [R307-401-8]

II.B.4.e.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.4.e.2 **Recordkeeping:**

To demonstrate compliance with a rolling 12-month total, the permittee shall calculate a new 12-month total no later than 20 days after the end of each month using data from the previous 12 months. Monthly records documenting WHRU duct burner operations shall be kept in a log and shall include the date and duration in hours of all WHRU duct burner operations. Records of operations shall be kept on monthly basis for all periods when the WHRU duct burner is in operation.

II.B.4.e.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.5 <u>Conditions on Ambulatory Care Complex Boilers</u>

II.B.5.a **Condition:**

Visible emissions from each boiler shall be no greater than 10 percent opacity when the natural gas is combusted and shall be no greater than 20 percent when the diesel is combusted. [DAQE-AN103540030-22]. [R307-401-8]

II.B.5.a.1 **Monitoring:**

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.

II.B.5.a.2 **Recordkeeping:**

Fuel records shall be maintained for demonstration of compliance with the opacity limitation during periods of natural gas usage.

For periods of fuel oil combustion, when an opacity observation or determination is required, a log of the results shall be maintained including all data required by 40 CFR 60, Appendix A, Method 9.

II.B.5.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.5.b **Condition:**

For five 10 MMBtu/hr and three 12 MMBtu/hr boilers, the permittee shall comply with all applicable requirements of 40 CFR 60 Subpart A. [40 CFR 60 Subpart A]. [40 CFR 60 Subpart A]

II.B.5.b.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.5.b.2 **Recordkeeping:**

All applicable records and notifications required by 40 CFR 60 Subpart A shall be maintained in accordance with provision I.S.1 of this permit.

II.B.5.b.3 **Reporting:**

The permittee shall comply with the reporting requirements in Section I of this permit and any additional reporting and notification requirements of 40 CFR 60 Subpart A.

II.B.5.c Condition:

For five 10 MMBtu/hr and three 12 MMBtu/hr boilers, the permittee shall keep monthly records of the amounts of each fuel combusted. [40 CFR 60.48c(g)]. [40 CFR 60 Subpart Dc]

II.B.5.c.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.5.c.2 **Recordkeeping:**

Records of the amounts of each fuel combusted during each month for each affected unit shall be maintained as described in Provision I.S.1 of this permit.

II.B.5.c.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.5.d Condition:

The permittee shall install boilers that are guaranteed to meet a NO_x emission rate of 30 ppm or less each. [DAQE-AN103540030-22]. [R307-401-8]

II.B.5.d.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.5.d.2 **Recordkeeping:**

The permittee shall keep a record of manufacturer's emission rate guarantee for the life of the equipment as described in Provision I.S.1 of this permit.

II.B.5.d.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.5.e Condition:

The permittee shall use only natural gas as the primary fuel and use only diesel as backup fuel in the boilers. The permittee shall operate all dual fuel boilers according to the following operational requirements:

- (1) The permittee shall limit diesel fuel usage in all dual fuel boilers to 48 hours each per rolling 12-month period for periodic testing, maintenance, or operator training
- (2) The permittee shall only use diesel fuel for periodic testing, maintenance, or operator training between March 1 and October 31
- (3) There is no time limit on the use of diesel fuel in the dual fuel boilers during periods of natural gas curtailment, gas supply interruption, or startups.

[DAQE-AN103540030-22.]. [R307-401-8]

II.B.5.e.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.5.e.2 **Recordkeeping:**

To demonstrate compliance, fuel records shall be kept for all periods when a boiler combusts a fuel other than natural gas. Records documenting diesel fuel usage in each dual-fuel boiler shall be kept in a log and shall include the date that diesel fuel is used, the duration of operation in hours, and the reason for diesel fuel usage.

All the records shall be maintained in accordance with provision I.S.1 of this permit.

II.B.5.e.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.6 <u>Conditions on Rehabilitation Hospital Backup Boiler</u>

II.B.6.a **Condition:**

Visible emissions from the boiler shall be no greater than 20 percent opacity. [DAQE-AN103540030-22]. [R307-401-8]

II.B.6.a.1 **Monitoring:**

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.

II.B.6.a.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.6.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.6.b **Condition:**

The permittee shall use only diesel fuel in the boiler. [DAQE-AN103540030-22.]. [R307-401-8]

II.B.6.b.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.6.b.2 **Recordkeeping:**

To demonstrate compliance, fuel records shall be kept for all periods when the boiler is operating

All the records shall be maintained in accordance with provision I.S.1 of this permit.

II.B.6.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.6.c Condition:

The permittee shall comply with all applicable requirements of 40 CFR 63 Subpart A. [40 CFR 63 Subpart A]. [40 CFR 63 Subpart A]

II.B.6.c.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.6.c.2 **Recordkeeping:**

All applicable records and notifications required by 40 CFR 63 Subpart A shall be maintained in accordance with provision I.S.1 of this permit.

II.B.6.c.3 **Reporting:**

The permittee shall comply with the reporting requirements in Section I of this permit and any additional reporting and notification requirements of 40 CFR 63 Subpart A.

II.B.6.d **Condition:**

The permittee shall conduct a tune-up every 5 years as specified in paragraphs (1) through (7) of this condition.

- (1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary the permittee may delay the burner inspection until the next scheduled unit shutdown, not to exceed 72 months from the previous inspection). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 72 months from the previous inspection.
- (2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
- (3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown, not to exceed 72 months from the previous inspection). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 72 months from the previous inspection.
- (4) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.
- (5) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
- (6) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.

Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. the first 5-year tune-up shall be no later than 61 months after the initial startup.

[40 CFR 63.11223(e)]. [40 CFR 63 Subpart JJJJJJ]

II.B.6.d.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.6.d.2 **Recordkeeping:**

All applicable records and notifications required by 40 CFR 63 Subpart JJJJJJ shall be maintained in accordance with provision I.S.1 of this permit.

II.B.6.d.3 **Reporting:**

The permittee shall submit, a report containing the information in paragraphs (a) through (c) of this section.

- (a) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.
- (b) A description of any corrective actions taken as a part of the tune-up of the boiler.
- (c) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. The permittee shall comply with the reporting requirements in Section I of this permit and any additional reporting and notification requirements of 40 CFR 63 Subpart A.

II.B.7 <u>Conditions on University Hospital Boilers</u>

II.B.7.a Condition:

Visible emissions from each boiler shall be no greater than 10 percent opacity and shall be no greater than 20 percent when the diesel is combusted. [DAQE-AN103540030-22]. [R307-401-8]

II.B.7.a.1 **Monitoring:**

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 diesel 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.

II.B.7.a.2 **Recordkeeping:**

Fuel records shall be maintained for demonstration of compliance with the opacity limitation during periods of natural gas usage.

For periods of fuel oil combustion, when an opacity observation or determination is required, a log of the results shall be maintained including all data required by 40 CFR 60, Appendix A, Method 9.

II.B.7.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.7.b **Condition:**

The permittee shall use only natural gas as the primary fuel and use only diesel as backup fuel. The permittee shall operate all dual fuel boilers according to the following operational requirements:

- (1) The permittee shall limit diesel fuel usage in all dual fuel boilers to 48 hours each per rolling 12-month period for periodic testing, maintenance, or operator training
- (2) The permittee shall only use diesel fuel for periodic testing, maintenance, or operator training between March 1 and October 31
- (3) There is no time limit on the use of diesel fuel in the dual fuel boilers during periods of natural gas curtailment, gas supply interruption, or startups.

[DAQE-AN103540030-22.]. [R307-401-8]

II.B.7.b.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.7.b.2 **Recordkeeping:**

To demonstrate compliance, fuel records shall be kept for all periods when a boiler combusts a fuel other than natural gas. Records documenting diesel fuel usage in each dual-fuel boiler shall be kept in a log and shall include the date that diesel fuel is used, the duration of operation in hours, and the reason for diesel fuel usage.

To determine compliance with a rolling 12-month total, the permittee shall calculate a new 12-month total by the 20th day of each month using data from the previous 12 months.

All the records shall be maintained in accordance with provision I.S.1 of this permit.

II.B.7.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.7.c Condition:

For Building 532 Unit 1 and 2 boilers, the permittee shall keep monthly records of the amounts of each fuel combusted. [40 CFR 60.48c(g)]. [40 CFR 60 Subpart Dc]

II.B.7.c.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.7.c.2 **Recordkeeping:**

Records of the amounts of each fuel combusted during each month for each affected unit shall be maintained as described in Provision I.S.1 of this permit.

II.B.7.c.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.7.d **Condition:**

For Building 532 Unit 1 and 2 boilers, the permittee shall comply with all applicable requirements of 40 CFR 60 Subpart A. [40 CFR 60 Subpart A]

II.B.7.d.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.7.d.2 **Recordkeeping:**

All applicable records and notifications required by 40 CFR 60 Subpart A shall be maintained in accordance with provision I.S.1 of this permit.

II.B.7.d.3 **Reporting:**

The permittee shall comply with the reporting requirements in Section I of this permit and any additional reporting and notification requirements of 40 CFR 60 Subpart A.

II.B.8 <u>Conditions on Huntsman Boilers</u>

II.B.8.a **Condition:**

Visible emissions from each boiler shall be no greater than 10 percent opacity when the natural gas is combusted and shall be no greater than 20 percent when the diesel is combusted. [DAQE-AN103540025-13]. [R307-401-8]

II.B.8.a.1 **Monitoring:**

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.

II.B.8.a.2 **Recordkeeping:**

Fuel records shall be maintained for demonstration of compliance with the opacity limitation during periods of natural gas usage.

For periods of fuel oil combustion, when an opacity observation or determination is required, a log of the results shall be maintained including all data required by 40 CFR 60, Appendix A, Method 9.

II.B.8.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.8.b **Condition:**

The permittee shall use only natural gas as a primary fuel and use only diesel as a backup fuel. The permittee shall operate all dual fuel boilers according to the following operational requirements:

- (1) The permittee shall limit diesel fuel usage in all dual fuel boilers to 48 hours each per rolling 12-month period for periodic testing, maintenance, or operator training
- (2) The permittee shall only use diesel fuel for periodic testing, maintenance, or operator training between March 1 and October 31
- (3) There is no time limit on the use of diesel fuel in the dual fuel boilers during periods of natural gas curtailment, gas supply interruption, or startups.

[DAQE-AN103540030-22.]. [R307-401-8]

II.B.8.b.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.8.b.2 **Recordkeeping:**

To demonstrate compliance, fuel records shall be kept for all periods when a boiler combusts a fuel other than natural gas. Records documenting diesel fuel usage in each dual-fuel boiler shall be kept in a log and shall include the date that diesel fuel is used, the duration of operation in hours, and the reason for diesel fuel usage.

To determine compliance with a rolling 12-month total, the permittee shall calculate a new 12-month total by the 20th day of each month using data from the previous 12 months.

All the records shall be maintained in accordance with provision I.S.1 of this permit.

II.B.8.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.8.c Condition:

For boilers located at Buildings 555 (Unit 1 and 2) and 556 (Unit 1 and 2), the permittee shall keep monthly records of the amounts of each fuel combusted, for each affected emission unit. [40 CFR 60.48c(g)]. [40 CFR 60 Subpart Dc]

II.B.8.c.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.8.c.2 **Recordkeeping:**

Records of the amounts of each fuel combusted during each month for each affected unit shall be maintained as described in Provision I.S.1 of this permit.

II.B.8.c.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.8.d **Condition:**

For boilers located at Buildings 555 (Unit 1 and 2) and 556 (Unit 1 and 2), the permittee shall comply with all applicable requirements of 40 CFR 60 Subpart A. [40 CFR 60 Subpart A]. [40 CFR 60 Subpart A]

II.B.8.d.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.8.d.2 **Recordkeeping:**

All applicable records and notifications required by 40 CFR 60 Subpart A shall be maintained in accordance with provision I.S.1 of this permit.

II.B.8.d.3 **Reporting:**

The permittee shall comply with the reporting requirements in Section I of this permit and any additional reporting and notification requirements of 40 CFR 60 Subpart A.

II.B.9 Conditions on Miscellaneous Primary Boilers

II.B.9.a **Condition:**

For the boilers located at Buildings 587 (Unit 1 and 2) and 865, the permittee shall keep monthly records of the amounts of fuel combusted, for each affected emission unit. [40 CFR 60.48c(g)]. [40 CFR 60 Subpart Dc]

II.B.9.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.9.a.2 **Recordkeeping:**

Records of the amounts of each fuel combusted during each month for each affected unit shall be maintained as described in Provision I.S.1 of this permit.

II.B.9.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.9.b **Condition:**

For the boilers located at Buildings 587 (Unit 1 and 2) and 865, The permittee shall comply with all applicable requirements of 40 CFR 60 Subpart A. [40 CFR 60 Subpart A]. [40 CFR 60 Subpart A]

II.B.9.b.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.9.b.2 **Recordkeeping:**

All applicable records and notifications required by 40 CFR 60 Subpart A shall be maintained in accordance with provision I.S.1 of this permit.

II.B.9.b.3 **Reporting:**

The permittee shall comply with the reporting requirements in Section I of this permit and any additional reporting and notification requirements of 40 CFR 60 Subpart A.

II.B.9.c Condition:

Visible emissions from each boiler shall be no greater than 10 percent opacity. [DAQE-AN103540030-22]. [R307-401-8]

II.B.9.c.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.9.c.2 **Recordkeeping:**

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

II.B.9.c.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.10 Conditions on Miscellaneous Backup Boilers

II.B.10.a **Condition:**

Visible emissions from each boiler shall be no greater than 10 percent opacity. [DAQE-AN103540030-22]. [R307-401-8]

II.B.10.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.10.a.2 **Recordkeeping:**

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

II.B.10.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.10.b Condition:

For the boilers located at Buildings 151, 565 and 581, the permittee shall keep monthly records of the amounts of fuel combusted. [40 CFR 60.48c(g)]. [40 CFR 60 Subpart Dc]

II.B.10.b.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.10.b.2 **Recordkeeping:**

Records of the amounts of fuel combusted during each month for each affected unit shall be maintained as described in Provision I.S.1 of this permit.

II.B.10.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.10.c Condition:

For the boilers located at Buildings 151, 565 and 581, the permittee shall comply with all applicable requirements of 40 CFR 60 Subpart A. [40 CFR 60 (Subpart A)]. [40 CFR 60 Subpart A]

II.B.10.c.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.10.c.2 **Recordkeeping:**

All applicable records and notifications required by 40 CFR 60 Subpart A shall be maintained in accordance with provision I.S.1 of this permit.

II.B.10.c.3 **Reporting:**

The permittee shall comply with the reporting requirements in Section I of this permit and any additional reporting and notification requirements of 40 CFR 60 Subpart A.

II.B.11 Conditions on Miscellaneous Small Boilers

II.B.11.a Condition:

Visible emissions from each boiler shall be no greater than 10 percent opacity. [DAQE-AN103540030-22]. [R307-401-8]

II.B.11.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.11.a.2 **Recordkeeping:**

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

II.B.11.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B. 12 Conditions on Small Diesel Fired Emergency Generators (<600 hp)

II.B.12.a **Condition:**

Visible emissions from each emergency generator shall be no greater than 20 percent opacity except for operation not exceeding 3 minutes in any hour. [DAQE-AN103540030-22]. [R307-401-8]

II.B.12.a.1 **Monitoring:**

A visual opacity survey shall be performed on a monthly basis by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as acceptable to the Director. If visible emissions other than condensed water vapor are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as acceptable to the Director.

II.B.12.a.2 **Recordkeeping:**

When an opacity observation or determination is required, a log of the results shall be maintained including all data required by 40 CFR 60, Appendix A, Method 9.

All records shall be maintained in accordance with provision I.S.1 of this permit.

II.B.12.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.12.b Condition:

The permittee shall not operate each emergency engines on site for more than 100 hours per rolling 12-month period during non-emergency situations. There is no time limit on the use of the engines during emergencies. [DAQE-AN103540030-22]. [R307-401-8]

II.B.12.b.1 **Monitoring:**

The permittee shall install a non-resettable hour meter for each engine on site.

II.B.12.b.2 **Recordkeeping:**

To demonstrate compliance with a rolling 12-month total, the permittee shall calculate a new 12-month total by the 20th day of each month using data from the previous 12 months.

The permittee shall maintain a log documenting the operation of each emergency engine which shall include the date and the time of day operation occurred, the duration of operation in hours, and the reason for the emergency engine usage when the emergency engine is operating.

All the records shall be maintained as described in Provision I.S.1 of this permit.

II.B.12.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.13 Conditions on Large Diesel Fired Emergency Generators (>600 hp).

II.B.13.a **Condition:**

Visible emissions from each emergency generator shall be no greater than 20 percent opacity except for operation not exceeding 3 minutes in any hour. [DAQE-AN103540030-22]. [R307-401-8]

II.B.13.a.1 **Monitoring:**

A visual opacity survey shall be performed on a monthly basis by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as acceptable to the Director. If visible emissions other than condensed water vapor are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as acceptable to the Director.

II.B.13.a.2 **Recordkeeping:**

When an opacity observation or determination is required, a log of the results shall be maintained including all data required by 40 CFR 60, Appendix A, Method 9.

All records shall be maintained in accordance with provision I.S.1 of this permit.

II.B.13.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.13.b **Condition:**

Except for the Ambulatory Care Complex emergency engines, the permittee shall not operate each emergency engine on site for more than 100 hours per rolling 12-month period during non-emergency situations. There is no time limit on the use of the engines during emergencies. [DAQE-AN103540030-22]. [R307-401-8]

II.B.13.b.1 **Monitoring:**

The permittee shall install a non-resettable hour meter for each engine on site.

II.B.13.b.2 **Recordkeeping:**

To demonstrate compliance with a rolling 12-month total, the permittee shall calculate a new 12-month total by the 20th day of each month using data from the previous 12 months.

The permittee shall maintain a log documenting the operation of each emergency engine which shall include the date operation occurred, the duration of operation in hours, and the reason for the emergency engine usage when the emergency engine is operating.

All the records shall be maintained as described in Provision I.S.1 of this permit.

II.B.13.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.13.c Condition:

For Building 151 (Sorenson Biotechnology) emergency engines, the permittee shall not operate more than one (1) emergency generator at a time during non-emergency situation. There is no time limit on the use of the engines during emergencies.

[DAQE-AN103540030-22]. [R307-401-8]

II.B.13.c.1 **Monitoring:**

Records required for this permit condition will serve as monitoring requirement.

II.B.13.c.2 **Recordkeeping:**

Records documenting usage shall be kept for each generator showing dates of use, duration of use, and the reason for usage and be maintained as described in Provision I.S.1 of this permit.

II.B.13.c.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.13.d **Condition:**

For the emergency engines located at HCI Phase 4, Crocker, Building 888, and Building 48, the permittee shall be limited to the followings during non-emergency situations:

- (1) Only operate each emergency engine once per calendar month;
- (2) Except for the HCI Phase 4 emergency engine, only operate each emergency engine between the hours of 10:00 am and 4:00 pm;
- (3) For the HCI Phase 4 emergency engine, only operate the emergency engine between the hours of 4:00 am and 8:00 am.
- (4) There is no time limit on the use of the engines during emergencies. \[DAQE-AN103540030-22]. [R307-401-8]

II.B.13.d.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.13.d.2 **Recordkeeping:**

The permittee shall maintain a log documenting the operation of each emergency engine which shall include the date and the time of day operation occurred, the duration of operation in hours, and the reason for the emergency engine usage when the emergency engine is operating.

All the records shall be maintained as described in Provision I.S.1 of this permit.

II.B.13.d.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.13.e Condition:

For the Ambulatory Care Complex emergency engines, the permittee shall be limited to the following for emergency engine operation during non-emergency situations:

- (1) For monthly maintenance and testing, the permittee shall:
- (a) Only operate each emergency engine once per calendar month;
- (b) Only operate each emergency engine between the hours of 5:00 am and 8:00 am;
- (c) Only operate each emergency engine a greater than 50% load for nor more than 30 minutes per hour for each operation event during non-emergency situations.
- (2). For annual maintenance and testing in addition to the above monthly maintenance and testing, the permittee shall:
- (a) Only operate each emergency engine once per calendar year for no more than one 24-hour period at any load;
- (b) Only operate one emergency engine at a time.
- (3) There is no time limit on the use of the engines during emergencies.
- [DAQE-AN103540030-22]. [R307-401-8]

II.B.13.e.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.13.e.2 **Recordkeeping:**

The permittee shall maintain a log documenting the operation of each emergency engine which shall include the date and the time of day operation occurred, the duration of operation in hours, the reason for the emergency engine usage, and the engine load during the operation when the emergency engine is operating. All the records shall be maintained as described in Provision I.S.1 of this permit.

II.B.13.e.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.13.f Condition:

The permittee shall vent exhaust gases from each Ambulatory Care Complex emergency engine with a stack height of no less than 34 feet above ground level. [DAQE-AN103540030-22]. [R307-401-8]

II.B.13.f.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.13.f.2 **Recordkeeping:**

The permittee shall keep a record of the stack height for each emergency engine as described in Provision I.S.1 of this permit.

II.B.13.f.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.14 Conditions on Generators Subject to NSPS IIII and MACT ZZZZ

II.B.14.a **Condition:**

The following Pre-2007 model year emergency generators shall comply with the emission standards in 40 CFR Part 60, Subpart IIII, Table 1:

Building 74, emergency generator 670 Hp

Building 79, emergency generator 670 Hp

Building 85 (x2), emergency generators, 900 Hp each

Building 526(x2), emergency generator, 1474 Hp

Building 556(x2), emergency generator, 2010 Hp

Building 565, emergency generator, 1341 Hp

[Origin: 40 CFR 60.4205(a); Authority: 40 CFR Part 60, Subpart IIII].

The following emergency generators are 2007 model year and later and shall comply with the emission standards for new non-road CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power:

Building 4, emergency generator, 134 Hp

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Building 7, emergency generator, 168 Hp.
Building 12, emergency generator, 670 Hp.
Building 13, emergency generator, 201 Hp.
Building 25, emergency generator, 134 Hp.
Building 26, emergency generator, 67 Hp.
Building 28, emergency generator, 34 Hp.
Building 35, emergency generator, 208 Hp.
Building 45, emergency generator, 1207 Hp.
Building 48, emergency generator, 755 Hp
Building 49, emergency generator, 54 Hp
Building 53, emergency generator, 74 Hp.
Building 57, emergency generator, 134 Hp.
Building 62, emergency generator, 871 Hp.
Building 64, emergency generator, 268 Hp.
Building 66, emergency generator, 47 Hp
Building 79, emergency generator, 670 Hp.
Building 82, emergency generator, 402 Hp
Building 84(x2), emergency generator, 260 Hp each.
Building 86, emergency generator, 2011 Hp.
Building 95, emergency generator, 600 Hp.
Building 112, emergency generator, 201 Hp.
Building 149, emergency generator, 27 Hp.
Building 151(x3), emergency generator, 1073 Hp each.
Building 197, emergency generator, 107 Hp.
Building 205, emergency generator, 27 Hp.
Building 210, emergency generator, 34 Hp
Building 212, emergency generator, 168 Hp
Building 301, emergency generator, 80 Hp.
Building 302, emergency generator, 804 Hp.
Building 303, emergency generator, 804 Hp.
Building 305, emergency generator, 27 Hp.
Building 372, emergency generator, 67 Hp...
Building 500, emergency generator, 34 Hp
Building 512, emergency generator, 80 Hp
Building 523, emergency generator, 536 Hp
Building 565, emergency generator, 1341 Hp.
Building 575, emergency generator, 476 Hp.
Building 581, emergency generator, 2682 Hp
Building 585, emergency generator, 134 HP
Building 587, emergency generator, 268 Hp
Building 588, emergency generator, 335 Hp.
Building 701, emergency generator, 201 Hp.
Building 702, emergency generator, 201 Hp.
Building 801, emergency generator, 229 Hp
Building 815, emergency generator, 47 Hp,
Building 821, emergency generator, 268 Hp
Building 853, emergency generator, 201 Hp.
Building 872, emergency generator, 697 Hp
Building 874, emergency generator, 539 Hp
Building 887, emergency generator, 167 Hp
Building 888, emergency generator, 755 Hp
Building 892, emergency generator, 100 Hp.
Ambulatory Care Center Parking Structure (Bldg. 369), emergency generator, 335 Hp.
Student Life Center (Bldg. 110), emergency generator, 268 Hp.
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School of Dentistry (Bldg. 841), emergency generator, 201 Hp.

Beverly T. Sorenson Arts & Education Center (Same as Bldg. 71), emergency generator, 308 Hp

Lassonde (Bldg. 46), emergency generator, 464 Hp

HSC Park, emergency generator, 134 Hp

Sutton Parking (Bldg. 41), emergency generator, 60 Hp

Field House (Bldg. 29), emergency generator, 68 Hp

Business Loop Parking (Bldg. 69), emergency generator, 134 Hp

ACC Building (x3) (Bldg. 5100), emergency generator, 2200 Hp

HCI Phase 4 (Bldg. 554), emergency generator, 2481 Hp

Crocker (Bldg. 5), emergency generator, 1676 Hp

[40 CFR 60.4205(b)]. [40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ]

II.B.14.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.14.a.2 **Recordkeeping:**

Records of engine certifications shall be maintained indicating compliance with the above referenced standards. Records may include labels attached to engines indicating conformance with U.S. EPA regulations for the appropriate year.

Records shall be maintained demonstrating compliance with the manufacturer's specifications for engine installation and configuration. [40 CFR 60 Subpart IIII]

Records shall be maintained in accordance with Provision I.S.1 of this permit.

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II.B.14.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.14.b **Condition:**

Emergency generators and control devices (if any) in this group shall be operated and maintained according to the manufacturer's emissions-related written instructions, over the entire life of the engine. The permittee may only change those settings that are permitted by the manufacturer. The permittee shall also meet the requirements of 40 CFR Part 1068, as they apply.

[40 CFR 60.4206, 40 CFR 60.4211(a)(1)-(3]. [40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ]

II.B.14.b.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.14.b.2 **Recordkeeping:**

Records demonstrating proper operation and maintenance shall be maintained.

Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.14.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.14.c Condition:

Emergency generators in this group shall use diesel fuel that meets the requirements of 40 CFR 1090.35 for nonroad diesel fuel.

[40 CFR 60.4207(b)]. [40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ]

II.B.14.c.1 **Monitoring:**

The permittee shall either:

- (1) Determine the fuel sulfur content expressed as wt% in accordance with the methods of the American Society for Testing Materials (ASTM);
- (2) Inspect the fuel sulfur content expressed as wt% determined by the vendor using methods of the ASTM; or
- (3) Inspect documentation provided by the vendor that directly or indirectly demonstrates compliance with this provision.

II.B.14.c.2 **Recordkeeping:**

Fuel receipt records and documentation demonstrating compliance with this provision shall be maintained. [40 CFR 60 Subpart IIII].

Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.14.c.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.14.d **Condition:**

Each emergency generator shall be operated according to paragraphs (i) through (iii) below. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (i) through (iii), is prohibited. Engines not operated according to the requirements in paragraphs (i) through (iii), will not be considered emergency engines and will be subject to requirements for non-emergency engines.

- (i) There is no time limit on the use of emergency engines in emergency situations.
- (ii) Emergency engines may be used for the purposes specified in paragraphs (a) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (iii) of this section counts as part of 100 hours per calendar year allowed by this paragraph (ii)
- (a) Emergency engines may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing

authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Director for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(iii) Emergency engines may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph (ii) above.

[Origin: 40 CFR 60.4211(f)]. [40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ]

II.B.14.d.1 **Monitoring:**

The permittee shall install a non-resettable hour meter for each engine on site.

II.B.14.d.2 **Recordkeeping:**

Records of monitoring shall be kept on a monthly basis in an operation and maintenance log. Records shall distinguish between maintenance-related hours and emergency use-related hours. If maintenance and testing beyond 100 hours per year are required by Federal, State, or local standards, records of these standards shall also be kept. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4211(e), and 40 CFR 60.4214(b)].

II.B.14.d.3 **Reporting:**

Emergency engines with a maximum engine power more than 100 HP that operate for the purposes specified in the above condition (iii)

Financial arrangements with another entity, require submittal of an annual report according to the requirements of 40 CFR Part 60.4214(d)(1)-(3).

There are no other reporting requirements for this provision except those specified in Section I of this permit.

II.B.15 Conditions on Natural Gas Fired Emergency Generators.

II.B.15.a **Condition:**

Visible emissions shall be not greater than 10 percent opacity. [DAOE-AN103540030-22]. [R307-401-8]

II.B.15.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.15.a.2 **Recordkeeping:**

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

II.B.15.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.15.b Condition:

- (1) The permittee shall comply with the emission standards in Table 1 of 40 CFR 60 Subpart JJJJ, for emergency engines with a rating greater than 75 kw (100 hp).
- (2) The permittee shall operate and maintain affected emission units that achieve the emission standards as required in this condition over the entire life of the engine.
- (3) For emergency stationary SI ICE, the permittee shall not install engines that do not meet the applicable requirements of this condition after January 1, 2011. This requirement does not apply to units that have been modified or reconstructed, and it does not apply to engines that were removed from one existing location and reinstalled at a new location.
- (4) The air-to-fuel ratio (AFR) controller shall be maintained and operated appropriately in order to ensure proper operation of affected emission units and control device to minimize emissions at all times. [40 CFR 60.4233(e), 40 CFR 60.4234, 40 CFR 60.4236(c), 40 CFR 60.4236(e), 40 CFR 60.4243(g)]. [40 CFR 60 Subpart JJJJ]

II.B.15.b.1 **Monitoring:**

The permittee shall demonstrate compliance with the emission standards according to one of the methods specified in (a) and (b) below.

- (a) Purchasing an engine certified according to procedures specified in 40 CFR Subpart JJJJ, for the same model year and demonstrating compliance according to one of the methods specified in paragraph (1) and (2).
- (1) If the permittee operates and maintains the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, the permittee shall keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. The permittee shall also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply. If the permittee adjusts engine settings according to and consistent with the manufacturer's instructions, the affected emission unit will not be considered out of compliance.
- (2) If the permittee does not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine, and the permittee shall demonstrate compliance according to (2)(i) below.
- (i) If the affected emission unit is less than 100 HP, the permittee shall keep a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but no performance testing is required.
- (ii) If the affected emission unit is greater than or equal to 100 HP and less than or equal to 500 HP, the permittee shall keep a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee shall conduct an initial performance test within 1 year of engine startup to demonstrate compliance.

(40 CFR 60.4243(b)(1), 40 CFR 60.4243(a))

(b) Purchasing a non-certified engine and demonstrating compliance with the emission standards according to the testing requirements specified in 40 CFR 60.4244, as applicable. If the affected emission unit is greater than 25 HP and less than or equal to 500 HP, the permittee shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee shall conduct an initial performance test to demonstrate compliance.

(40 CFR 60.4243(b)(2)).

II.B.15.b.2 **Recordkeeping:**

For each affected emission unit, the permittee shall keep records of the information in paragraphs (a) through (d).

- (a) All notifications submitted to comply with this condition and all documentation supporting any notification.
- (b) Maintenance conducted on the engine.
- (c) If the stationary SI ICE is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.
- (d) If the stationary SI ICE is not a certified engine or is a certified engine operating in a non-certified manner, documentation that the engine meets the emission standards. (Origin: 40 CFR 60.4245(a))

Records and results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.15.b.3 **Reporting:**

For stationary SI ICE that are subject to performance testing, the permittee shall submit a copy of each performance test as conducted in 40 CFR 60.4244 within 60 days after the test has been completed. (40 CFR 60.4245(d))

There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.15.c Condition:

Each emergency generator shall be operated according to paragraphs (i) through (iii) below. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (i) through (iii), is prohibited. Engines not operated according to the requirements in paragraphs (i) through (iii), will not be considered emergency engines and will be subject to requirements for non-emergency engines.

- (i) There is no time limit on the use of emergency engines in emergency situations.
- (ii) Emergency engines may be used for any combination of the purposes specified in paragraphs (a) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (iii) of this section counts as part of the 100 hours per calendar year allowed this

paragraph (ii).

- (a) Emergency engines may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Director for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
- (iii) Emergency engines may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (ii) above.

[40 CFR 60.4243(d). [40 CFR 60 Subpart JJJJ, 40 CFR 63 Subpart ZZZZ]

II.B.15.c.1 **Monitoring:**

The permittee shall install a non-resettable hour meter upon startup of the emergency engine.

II.B.15.c.2 **Recordkeeping:**

The permittee shall keep records of the hours of operation of the affected emission unit that is recorded through the non-resettable hour meter.

The permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. (40 CFR 60.4245(b))

Records shall be maintained as described in Provision I.S.1 of this permit.

II.B.15.c.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.16 Conditions on Building 350 Paint Booth

II.B.16.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [DAQE-AN103540030-22]. [R307-401-8]

II.B.16.a.1 **Monitoring:**

In lieu of monitoring via visible emissions observations, the spray booth particulate capture system shall be inspected before each use to verify that it is functioning properly. Inspections shall consist of the following observations:

- (A) Inspection for holes in the particulate filters.
- (B) Inspection of the particulate filters to determine proper installation within the support rack.

(C) Inspection of the exhaust fan to ensure that it is operating.

II.B.16.a.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.16.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.17 <u>Conditions on Building 350- Carpentry Shop</u>

II.B.17.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity except for operation not exceeding 3 minutes in any hour. [DAQE-AN103540030-22]. [R307-401-8]

II.B.17.a.1 **Monitoring:**

Opacity observations shall be conducted annually in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.17.a.2 **Recordkeeping:**

A log of opacity determinations shall be maintained including all data required by 40 CFR 60, Appendix A, Method 9.

II.B.17.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.17.b **Condition:**

Operation of the carpentry shop dust collector shall not exceed 1043 hours per rolling 12-month period. [DAQE-AN103540030-22]. [R307-401-8]

II.B.17.b.1 **Monitoring:**

Hours of operation shall be determined based on a 12-month rolling total calculated by 20th day of each month using the previous 12 months data.

II.B.17.b.2 **Recordkeeping:**

Monthly records documenting dust collector usage shall be kept in a log maintained by the Carpentry Shop Supervisor. Records shall show the date and the duration in hours of dust collector usage.

II.B.17.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.18 Conditions on University Hospital Ethylene Oxide Sterilizer.

II.B.18.a **Condition:**

The permittee shall comply with the applicable requirements of 40 CFR 63 Subpart WWWWW (National Emission Standards for Hospital Ethylene Oxide Sterilizers). [40 CFR part 63, subpart WWWWW]. [40 CFR 63 Subpart WWWWW]

II.B.18.a.1 **Monitoring:**

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR part 63, subpart WWWWW.

II.B.18.a.2 **Recordkeeping:**

All records required in 40 CFR part 63, subpart WWWWW shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

II.B.18.a.3 **Reporting:**

All notifications and reports required in 40 CFR part 63, subpart WWWWW shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

II.B.19 Conditions on Misc. Parts Washers (subject to R307-335-2).

II.B.19.a **Condition:**

The permittee shall ensure that the following conditions are met:

- (1) Each solvent degreaser is equipped with a cover which shall remain closed except during actual loading, unloading or handling of parts in cleaner. The cover shall be designed so that it can be easily operated with one hand if
- (a) the volatility of the solvent is greater than 2 kPa (15 mm Hg or 0.3 psi) measured at 38 degrees C (100 degrees F),
- (b) the solvent is agitated, or
- (c) the solvent is heated.
- (2) An internal draining rack for cleaned parts shall be installed on which parts shall be drained until all dripping ceases. If the volatility of the solvent is greater than 4.3 kPa (32 mm Hg at 38 degrees C (100 degrees F)), the drainage facility must be internal, so that parts are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (3) Waste or used solvent shall be stored in covered containers.
- (4) Tanks, containers and all associated equipment shall be maintained in good operating condition and leaks shall be repaired immediately or the degreaser shall be shutdown.
- (5) Written procedures for the operation and maintenance of the degreasing or solvent cleaning equipment shall be permanently posted in an accessible and conspicuous location near the equipment.

- (6) If the solvent volatility is greater than 4.3 kPa (33 mm Hg or 0.6 psi) measured at 38 degrees C (100 degrees F), or if solvent is heated above 50 degrees C (120 degrees F), then one of the following control devices shall be used:
- (a) freeboard that gives a freeboard ratio greater than 0.7;
- (b) water cover if the solvent is insoluble in and heavier than water;
- (c) other systems of equivalent control, such as a refrigerated chiller or carbon absorption.
- (7) If used, the solvent spray shall be a solid fluid stream at a pressure which does not cause excessive splashing and may not be a fine, atomized or shower type spray.

[R307-335-4]. [R307-335-4]

II.B.19.a.1 **Monitoring:**

A visual observation shall be conducted monthly for all equipment and applicable work practices.

II.B.19.a.2 **Recordkeeping:**

Results of monthly inspections and the volatility of the solvent(s) being used shall be recorded and maintained as described in Provision I.S.1 of this permit.

II.B.19.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.C <u>Emissions Trading.</u>

Not applicable to this source.

II.D Alternative Operating Scenarios.

Not applicable to this source.

II.E <u>Source-specific Definitions.</u>

Not applicable to this source

SECTION III: PERMIT SHIELD

A permit shield was not granted for any specific requirements.		

SECTION IV: ACID RAIN PROVISIONS

IV.A This source is not subject to Title IV. This section is not applicable.

REVIEWER COMMENTS

This operating permit incorporates all applicable requirements contained in the following documents:

Incorporates	DAQE-AN103540030-22 dated December 22, 2022
Incorporates	SIP Section IX.H.2.1 dated January 2, 2019
Incorporates SIP Section IX.H.12.p (State Only Requirements) dated January 2, 2019	

1. Comment on an item originating in regarding Permitted source

Comment on an item regarding 40 CFR part 64, Compliance Assurance Monitoring Applicability: CAM applicability has been evaluated. There are no CAM requirements in this permit. [Last updated January 9, 2020]

- 2. Comment on an item originating in regarding Rehabilitation Hospital Backup Boiler
 Comment on an item originating in 40 CFR Part 63, Subpart HHHHHHH, National
 Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous
 Surface Coating Operations at Area Sources: 40 CFR Part 63, Subpart HHHHHHH does not
 apply to the paint booth as long as the University does not use any of the target HAPS
 identified by the rule.

 [Last updated January 9, 2020]
- 3. Comment on an item originating in regarding Permitted source

Comment on an item originating in 40 CFR Part 63, Subpart ZZZZ, regarding, Existing Emergency Generators.: Per 40 CFR Part 63.6590(b)(3), existing institutional emergency stationary RICE located at an area source of HAP emissions, do not have to meet the requirements of subparts ZZZZ and A. No initial notification is necessary.

The following Generators are Exempt/Existing Emergency generators with no requirements under 40 CFR Part 63, Subpart ZZZZ, but having requirements under 40 CFR Part 60, Subpart IIII:

Locations (hp): bldg 85 (168 hp); bldg 526 (1,475 hp); and bldg 526 (1,475 hp).

The following Generators are New Emergency generators under 40 CFR Part 63, Subpart ZZZZ, that reference requirements under 40 CFR Part 60, Subpart IIII:

Locations (hp): bldg 7 (197 hp); bldg 12 (670 hp); bldg 25 (232 hp); bldg 26 (78 hp); bldg 28 (42hp); bldg 45 (325 hp); bldg 53 (103 hp); bldg 57 (232 hp); bldg 57 (134 hp); bldg 62 (804 hp); bldg. 64 (373 hp); bldg 79 (732 hp); bldg 84 (1620 hp); bldg 85 (900 hp); bldg 85 (1,848 hp); bldg 86 (2,011 hp); bldg. 95 (268 hp); bldg 112 (232 hp); bldg 149 (34 hp); bldg 151 (1,175 hp); bldg 151 (1,175 hp); bldg 151 (1,175 hp); bldg 205 (42 hp); bldg 301 (80 hp); bldg 303 (804 hp); bldg 305 (27 hp); bldg. 372 (88 hp); bldg 512 (103 hp); bldg 581 (2,923 hp); bldg. 587 (268 hp); bldg 588 (335 hp), bldg 701 (201 hp); bldg 702 (201 hp); bldg 801 (229 hp); bldg 853 (757 hp); bldg 892 (78 hp); Ambulatory Care Center Parking Structure (382 hp); Student Life Center (382 hp); School of Dentistry (232 hp); Beverly T. Sorenson Arts & Education Center (308 hp). [Last updated December 2, 2013]

4. Comment on an item originating in AO (DAQE-AN0354010-04) regarding Permitted source Historical Comments on items originating in AO (DAQE-AN0354010-04): The following changes were made thru the issuance of AO DAQE-AN0354010-04 and are included in

this Title V Permit:

- 1) DAQE-081-02: AO condition #11 required that the boilers use natural gas only. The boilers are natural gas by design. In the new consolidated AO, the natural gas design feature is included in the emissions unit description and is no longer listed as a distinct permit condition.
- 2) DAQE-081-02: AO condition #12 required generators to use 0.5 percent sulfur fuels or less in the generators. That condition was subsumed by a more stringent limitation in AO condition #11 which required #1 or #2 fuel oils. Since #1 and #2 fuel oils contain less than 0.5 percent sulfur by weight, AO condition #12 was therefore unnecessary and was not carried forward into this permit.
- 3) DAQE-265-01: AO condition #11 required the generators to use 0.5 percent sulfur fuels or less in the generators. That condition was subsumed by a more stringent limitation in AO condition #10 which required #1 or #2 fuel oils. Since #1 and #2 fuel oils contain less than 0.5 percent sulfur by weight, AO condition #11 was therefore unnecessary and was not be carried forward into the new permit.
- 4) DAQE-264-01: AO condition #10 required that the boilers and comfort heating equipment use natural gas only. The boilers and comfort heating equipment are natural gas by design. In the new consolidated AO, the natural gas design feature was included in the emissions unit description and was not listed as a distinct permit condition.
- 5) DAQE-264-01: AO condition #4 incorrectly listed building 822 as the location for a 208 kW diesel generator. The building number was corrected to 821.
- DAQE-128-01: AO condition #13 included the requirement that natural gas be used as primary fuel. UH Boilers (AO condition #6.A(6)-(8)), and boilers included in Misc. Equipment (AO condition #6.B.), can burn only natural gas by design. Hence, the natural gas design feature was listed in the new permit as part of the emissions unit description. A separate permit requirement for natural gas as primary fuel was retained for the LC Boilers (AO condition #6.A(1)-(5)) because they have dual fuel capability.
- 7) DAQE-128-01: AO condition #6 listed four portable emergency diesel fired generators that have been removed and are no longer on site. Hence, these units are not included in the consolidated AO. The emergency diesel generator-building list from AO condition #6 was also updated to change building 240 to building 213. Buildings 3, 4, 19, 35, 82, 697, 801, and 853 were also be added.
- 8) DAQE-712-99: AO condition #4 required annual training for all employees operating equipment. The Title V permit for the University of Utah includes record keeping and reporting conditions that sufficiently demonstrate whether or not equipment is being operated properly. For that reason, the annual employee training program was unnecessary and was not carried forth into the new AO.
- 9) DAQE-712-99: AO condition #9 required the paint booth to be equipped with particulate filters. In the new AO, that design requirement was included as part of the emissions unit description.
- 10) DAQE-962-96: AO conditions #6 and #7 establish [Last updated January 9, 2020]
- 5. Comment on an item originating in AO (DAQE-AN0354014-06) regarding Permitted source

- Historical comments, modifications made 10/26/06: The changes from the previous AO (DAQE-AN0354010-04) to the new AO (DAQE-AN0354014-06) include:
- (1) Replace two diesel fired emergency generators for the newly constructed John A. Moran Eye Center (formerly Moran Eye Center Phase II-Diesel Generators) rated at 300 kW and 700 kW with two diesel fired emergency generators rated up to 400 kW and 1250 kW bhp).
- (2) Increase the combined capacity for "Diesel-Generators" emissions unit description from 9,885 kW to 12,020 kW.
- (3) Add a new diesel fired emergency backup generator to "Diesel-Generators" The location is Building 85. The generator is rated up to 600 kW.
- (4) Revise building numbers for "Diesel-Generators" emissions unit description. Deleted buildings are: 3, 86, 179, and 801. Added buildings are: 85 and 526.
- (5)University Hospital diesel fired emergency backup generators upgraded. One 500 kW generator and one 1000 kW generator replaced with two 1100 kW generators. These generators are found in building 526 (under the "Diesel-Generators" emissions unit description.)
- (6) All references to the U-furnace are deleted because it has been removed from service and dismantled.
- (7) Eccles Critical Care Pavilion has been deleted from this permit because the boilers and generators were never installed.
- (8) For the emissions unit "Underground Fuel Storage Tanks," Subpart Kb was removed as an applicable requirement since these tanks meet the size and vapor pressure requirements of 40 CFR 60.110b (b) and (c).
- (9) "LC Boilers" renamed "Building 303 Boilers"
- (10) Ratings for UH (University Hospital) Boilers changed:
- Two boilers changed from 9.88 MMBTU/hr to 10.5 MM Btu/hr (Building 521/525).

One boiler changed from 9.83 MM Btu/hr to 13.5 MM Btu/hr (Building 526).

- (11) "UC NSPS Boilers" renamed "Building 302 NSPS Boilers"
- (12) UC Diesel Emergency Generator renamed Building 302 Diesel Emergency Generator.
- (13) Fuel Storage Tanks (NSPS) name has been changed to "Underground Fuel Storage Tanks." NSPS requirement has been removed due to change in Federal Regulations.
- (14) Change Moran Eye Center Phase I to Building 550.
- (15) Change Moran Eye Center Phase II to Building 523. Change generators to 400 and 1250 kW.
- (16) Change Health Sciences Education Building to Building 575.
- (17) Change Emma-Eccles-Jones Medical Research Center to Building 565.
- (18) Opacity limit for diesel generators has been revised from 10 percent to 20 percent.
- (19) Natural gas equipment less than 5 MM Btu/hr at Huntsman Cancer Hospital Added to Misc Equipment.
- (20) "New Student Housing Emergency Diesel Generators" renamed to "Student Housing Emergency Diesel Generators"
- (21) Combustion Lab U-furnace deleted from permit.
- (22) "Huntsman Cancer Institute (Phase I)" changed to "Building 555 Huntsman Cancer Institute".
- (23) Huntsman Cancer Institute Phase II " changed to "Building 556 Huntsman Cancer Hospital."
- (24) Add requirements for 40 CFR Part 82 Subparts B and F.
- (25) Also a correction was made to the visible emissions monitoring Requirement for "Diesel generators- 4223 bhp Combined." Monitoring changed from calendar year to annual per the original AO requirement.

[Last updated January 9, 2020]

- 6. Comment on an item originating in AO (DAQE-AN0354016-07) regarding Building 303 LCHWTP Cogeneration Unit
 - Historical Comments on items originating in AO (DAQE-AN0354016-07): -For the turbine and duct burner together, the NO_x emissions limit (25 ppm) from 40 CFR 60.4420 Table 1, has been subsumed by AO condition 22C which is more stringent (15 ppm) and has been included in this Title V permit.
 - -The initial performance testing requirement for NO_x given by 60.4400(a), and 60.8, is covered by AO condition 22.E. which is included in this Title V permit.
 - -The NO_x testing frequency from 40 CFR 60.4340(a) allows testing on a two year basis. That requirement has been subsumed by AO condition 22(E) which is included in this Title V permit and requires testing every year and is thus more stringent.
 - -The written report required by 40 CFR 60.4375(b) for annual NO_x performance tests is covered by AO condition 22.L. which is included in this Title V permit. [Last updated February 14, 2008]
- 7. Comment on an item originating in AO (DAQE-AN0354014-06) regarding Permitted source Historical comments on items originating in AO (DAQE-AN0354014-06): Modifications made 10/26/06:
 - 11) DAQE-962-96: AO condition #4 was not carried forward into the new AO. Condition #4 was from an older version of the AO boiler-plate comprised of general requirements. That particular training requirement is no longer generally applied to all sources receiving new approval orders. Training requirements are reserved for special cases when appropriate. For this particular case, the Combustion Lab, the training requirement was deemed unnecessary.
 - 12) DAQE-962-96: AO condition #9E required daily record keeping of natural gas usage. That requirement was not carried over into the new AO because there is no daily limit for natural gas usage.
 - DAQE-0607-93: AO condition #5 was not carried forward into the new AO. Condition #5 required posting of the AO and employee training. That particular condition is from an older version of the AO boiler-plate comprised of general requirements and is no longer generally applied to all sources receiving new approval orders. Training requirements are reserved for special cases when appropriate. For this particular case, training for the fume hoods and posting of the AO is not deemed necessary as safe operation of the fume hoods is covered by OSHA and the Standard Operating Practices (SOPs) described in the University of Utah's "Chemical Hygiene Plan of the University of Utah" and "Safety and Health Manual".
 - 14) DAQE-0607-93: AO condition #9 placed an opacity limit of 10% on laboratory Fume Hoods. The purpose of these hoods is for controlling fumes, not smoke. For that reason, an opacity limit on these hoods is not necessary and will not be included in the new AO.
 - 15) Two NSPS boilers and an emergency generator were added to the Eccles Critical Care Pavilion.
 - 16) The four boilers at the Huntsman Cancer Institute (Phase I) were retrofitted to burn both natural gas and diesel.

- 17) Two non-NSPS boilers and two emergency generators were added to the Huntsman Cancer Institute-Phase II.
- 18) One NSPS boiler and one emergency generator were added to the Emma Eccles Jones Medical Research Center.
- 19) One 500 kW diesel emergency generator were added to the Moran Eye Center Phase I.
- 20) An out of service boiler located at the Moran Eye Center Phase I, were listed for identification purposes only.
- 21) Two emergency generators were added to the Moran Eye Center-Phase II.
- 22) One emergency generator was added to the Health Sciences Education Building.
- 23) Several insignificant emissions units were listed for identification purposes only.
- 24) One Cauldron/ 2002-Winter-Olympics monument, was listed for identification purposes only.
- 25) UH Boilers are designated as natural gas/diesel design boilers. [Comment last updated on 12/06/2004]
- 8. Comment on an item originating in AO (DAQE-AN0354016-07) regarding Building 303 LCHWTP Cogeneration Unit

Historical Comments on items originating in AO (DAQE-AN0354016-07): Incorrect NSPS citiation in Approval order: Condition 25 of AO AN0103540016-07 cites 40 CFR Part 60, Subpart Dc as an applicable requirement for the duct burner. However, that equipment is exempted per 40 CFR Part 60.40c(e) (units subject to Subpart KKKK are exempt from Dc). [Last updated February 12, 2008]

- 9. Comment on an item originating in 40 CFR Part 63, Subpart JJJJJJ regarding Permitted source Comment regarding Boiler MACT 40 CFR Part 63, Subpart JJJJJJ: This regulation does not apply to the boilers at the University of Utah. They meet the exemption for and definition of Gas-fired boiler (Periodic testing of liquid fuel does not exceed a combined total of 48 hours during any calendar year). [Last updated January 9, 2020]
- 10. Comment on an item originating in regarding Permitted source

 Historical Comment regarding Greenhouse Gases (GHGs): GHG applicability has been reviewed and evaluated for AO DAQE-AN0103540022-11 and there are no GHG requirements included in this permit. [Last updated January 9, 2020]
- 11. Comment on an item originating in this permit regarding Permitted source
 - 2023 Renewal Permit: Incorporates changes approved under AOs
 - (1) DAQE-AN103540026-19 (superseded): Installed new boilers for Ambulatory Care Complex
 - (2) DAQE-AN103540028-21 (superseded): Installed new emergency generators for Ambulatory Care Complex
 - (3) DAQE-AN103540030-22: Replaced Boiler 4 with Boiler 9, revised emission limits for Boiler 6&7, increased natural gas consumption limit, replaced Building 32 boilers, decommission several emission units, added some new boilers and emergency generators, and updated equipment lists to include all emergency generators and all storage tanks on site. [Last updated May 1, 2023