



State of Utah

GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF AIR QUALITY
Cheryl Heying
Director

DAQE-IN0103540021-09

October 22, 2009

Marty Shaub
University of Utah
Building 605
125 South Fort Douglas Blvd
Salt Lake City, UT 84112

Dear Ms. Shaub:

Re: Intent to Approve: Modification to Approval Order DAQE-AN0103540019-08 to install Two Emergency Generators and Replace One Boiler, Salt Lake County; CDS A; MACT (Part 63), NSPS (Part 60), Nonattainment or Maintenance Area, Title V (Part 70)
Project Number: N010354-0021

The attached document is the Intent to Approve for the above-referenced project. The Intent to Approve is subject to public review. Any comments received shall be considered before an Approval Order is issued. The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an Approval Order. An invoice will follow upon issuance of the final Approval Order.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. The project engineer for this action is Nando Meli Jr., who may be reached at (801) 536-4052.

Sincerely,

Martin D. Gray, Manager
Major New Source Review Section

MDG:NM:sa

cc: Mike Owens
Salt Lake Valley Health Department

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

**INTENT TO APPROVE: Modification to Approval Order DAQE-
AN0103540019-08 to install Two Emergency Generators and
Replace One Boiler**

**Prepared By: Nando Meli Jr., Engineer
Phone: (801) 536-4052
Email: nmeli@utah.gov**

INTENT TO APPROVE NUMBER

DAQE-IN0103540021-09

Date: October 22, 2009

**University of Utah
University of Utah Facilities**

**Source Contact:
Ms. Judy Moran
Phone: (801) 585-1617**

**Martin D. Gray, Manager
Major New Source Review Section
Utah Division of Air Quality**

ABSTRACT

The University of Utah (U of U) has requested approval to add two emergency generators and a boiler to the Salt Lake City Campus. The new diesel fired emergency generators will be located in the Utah Museum of Natural History (UMNH) and the College of Nursing. A 2220 hp emergency generator will be installed in the UMNH. The 399 hp emergency generator for the College of Nursing will be replacing a gasoline-fired emergency generator. The 25.2 MMBTU/hr natural gas fired boiler is a replacement for the 13.5 MMBTU/hr boiler located in Building 526. It will be an emergency backup boiler for the hospital. Emissions from the University of Utah are primarily due to the operation of: boilers, comfort heating equipment, and emergency generators. Large boilers located on the campus are subject to NSPS 40 CFR Part 60 Subpart Dc. Some of the emergency generators located on campus are subject to 40 CFR Part 60 Subpart IIII and Part 63 Subpart ZZZZ. The campus is located in Salt Lake City which is a non-attainment area of the NAAQS for PM₁₀ and SO₂, and is a Maintenance area for Ozone and CO. Title V of the 1990 Clean Air Act applies to this source. The Title V operating permit for this source shall be amended prior to the operation of the equipment. This AO will go through the enhanced NSR process. The emissions, in tons per year, will change as follows: PM₁₀ (+) 0.50, SO₂ (+) 1.53, NO_x (+) 7.04, CO (+) 4.88, and VOC (+) 0.11. The changes in emissions will result in the following, in tons per year, potential to emit totals: PM₁₀ = 28.37, NO_x = 171.42, SO₂ = 23.93, CO = 191.64, VOC = 21.40 and Hazardous Air Pollutants = 4.06.

The NOI for the above-referenced project has been evaluated and has been found to be consistent with the requirements of UAC R307. Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an AO by the Executive Secretary of the Utah Air Quality Board.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notification of the intent to approve will be published in the Salt Lake Tribune and Deseret News on October 26, 2009. During the public comment period the proposal and the evaluation of its impact on air quality will be available for the public to review and provide comment. If anyone so requests a public hearing, it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated. The proposed conditions of the AO may be changed as a result of the comments received.

Name of Permittee:

University of Utah
Building 605
125 South Fort Douglas Blvd
Salt Lake City, UT 84112

Permitted Location:

University of Utah facilities
200 S University Ave
Salt Lake City, UT 84112

UTM coordinates: 429440 m Easting, 4512800 m Northing
SIC code: 8221 (Colleges, Universities, & Professional Schools)

Section I: GENERAL PROVISIONS

- I.1 All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]

- I.2 The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
- I.3 Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]
- I.4 All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401]
- I.5 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]
- I.6 The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring. [R307-150]
- I.7 The owner/operator shall comply with UAC R307-107. General Requirements: Unavoidable Breakdowns. [R307-107]

Section II: SPECIAL PROVISIONS

II.A The approved installations shall consist of the following equipment:

II.A.1 U of U Campus

U of U operates incinerators, turbines, boilers, comfort heating equipment, and emergency generators.

II.A.2 Boiler in Building 32

Building 32 West (Rice-Eccles Stadium)

Natural gas fired boiler rated up to 14.7 million British Thermal Units per hour (MMBtu/hr). Subject to NSPS, 40 CFR, Part 60, Subpart Dc.

II.A.3 Boiler in Building 33

Building 33 (Rice-Eccles Stadium Clark Football Center)

Natural gas fired boiler rated up to 5.25 MMBtu/hr

II.A.4 Boilers in Building 302

Building 302 NSPS Boilers

Three NSPS boilers (40 CFR, Part 60 Subpart Dc). These boilers all have 15% flue gas recirculation, and are fired on natural gas using diesel as a backup fuel. Rating for each boiler is up to 87.5 MMBtu/hr.

II.A.5 Boilers in Building 303

Building 303 (High Temperature Water Plant) Pre-NSPS Boilers

Three natural gas fired boilers, 3, 4 and 5 that are each rated up to 105 MMBtu/hr.

II.A.6 Buildings 521/525/526/532 (University Hospital)

Two boilers that are rated up to 10.5 MMBtu/hr (Pre NSPS), located in Building 521/525.

Two NSPS boilers (40 CFR, Part 60 Subpart Dc) located in Building 532. These boilers have a 15 parts per million (ppm) NO_x rating, and are fired on natural gas using diesel as a backup fuel. Rating for each boiler is up to 25.2 MMBtu/hr.

Boiler in Building 526 is out of service and is listed for informational purposes only.

II.A.7 Building 523 Boilers

Building 523 (Moran Eye Center)

One boiler fired on natural gas and rated up to 8.2 MMBtu/hr.

II.A.8 Boiler for Building 550

Building 550 (Clinical Neurosciences Center) - Out of Service Boiler

This boiler is out of service and is listed for informational purposes only.

II.A.9 Boiler for Building 555

Building 555 (Huntsman Cancer Institute)

1) Huntsman Cancer Institute - NSPS Boilers

Two natural gas/diesel fired boilers, each rated up to 16.8 MMBtu/hr.
Subject to NSPS, 40 CFR, Part 60, Subpart Dc.

2) Huntsman Cancer Institute - Small Boilers

Two small natural gas/diesel fired boilers that are each rated up to 5 MMBtu/hr.

II.A.10 **Boilers for Building 556**

Building 556 (Huntsman Cancer Hospital) - Small Boilers 1-2

Two boilers fired on either natural gas or fuel oil and are rated up to 6 MMBtu/hr each.

II.A.11 **Boiler for Building 565**

Building 565 (Emma-Eccles-Jones Medical Research Center)

The boiler is fired on natural gas and rated up to 19 MMBtu/hr. This boiler is subject to NSPS, 40 CFR, Part 60, Subpart Dc.

II.A.12 **Boilers for Building 587**

Building 587 NSPS Natural Gas Boilers

Two natural gas fired boilers that are rated up to 13.5 MMBtu/hr each. The boilers are subject to NSPS, 40 CFR, Part 60, Subpart Dc.

II.A.13 **Boiler for Building 853**

Building 853 (Health Profession Education)

The natural gas fired boiler is rated up to 8.4 MMBtu/hr.

II.A.14 **Building 303 (High Temperature Water Plant)**

High Temperature Water Plant Cogeneration Unit located in Building 303 is a natural gas fired Solar Taurus 70 T7800S turbine with Waste Heat Recovery Unit (WHRU) that has a duct burner rated at 85 MMBtu/hr. The natural gas turbine is site rated at 7.23 MegaWatts (MW) with maximum heat input of 72.78 MMBtu/hr. The gas turbine is subject to NSPS, 40 CFR, Part 60, Subpart KKKK, the duct burner is subject to NSPS, 40 CFR, Part 60, Subpart Dc.

II.A.15 **University Hospital Ethylene Oxide Sterilizer**

One small sterilization unit. This sterilization unit uses less than 1 ton of ethylene oxide in any consecutive 12-month period. This unit is subject to 40 CFR Part 63, Subpart WWWW (National Emission Standards for Hospital Ethylene Oxide Sterilizers).

II.A.16 **Building 587 Incinerator**

Incinerator for the combustion of pathological waste, low level radioactive waste, or chemotherapeutic waste.

II.A.17 Emergency Generators

Diesel-fired emergency generators supporting the following buildings that are each rated less than 600 Horsepower (Hp):

Buildings 4, 7, 12, 13, 14, 19, 26, 28, 35, 45, 49, 53, 57, 64, 66, 82, 84, 85, 87, 95, 205, 210, 212, 213, 301, 305, 347, 500, 523, 540, 575, 585, 588, 697, 701, 702, 815, 821/822, 874, and 892. The emergency generators listed above have a combined total capacity of up to 7,148 Hp.

II.A.18 Emergency Generators

Diesel-fired emergency generators supporting the following buildings that are each rated greater than 600 Hp:

Buildings 1, 32, 62, 85, 86, 179, 302, 303, 521/525, 523, 526, 533, 550, 555, 556, 565, 570, 585, 587, and 853. The emergency generators listed above have a combined total capacity of up to 33,621 Hp.

II.A.19 Emergency Generators

Gasoline fired emergency generator supports Building 84. The emergency generator has a maximum rating of 22 Hp

II.A.20 Emergency Generators

Natural gas fired emergency generators supporting Buildings 64, 67, 350, 500, and 685. The emergency generators listed above have a combined total capacity of up to 300 kW.

II.A.21 Building 350 Paint Booth and Print Plant

Includes the paint booth and equipment located in the printing plant.

- 1) Paint booth painting operation is used primarily for refinishing wood furniture. Equipped with particulate filters.
- 2) Print plant printing operations including letter and offset presses.

II.A.22 Olympic Cauldron

This is a seldom used ornamental monument from the Salt Lake 2002 Olympics and is listed for identification only.

II.A.23 Fume Hoods

Fume hoods located in the Art Department and in various labs throughout the campus. These are listed for informational purposes only.

II.A.24 **Small Fuel Storage Tanks**

Various fuel tanks located throughout the campus; each tank has a storage capacity of 10,000 gallons or less. No unit-specific applicable requirements. The tanks are noted in this Condition for informational purposes only.

II.A.25 **Underground Fuel Storage Tanks**

Located at the University Hospital. Two Diesel tanks approximately 20,000 gallons each, one diesel tank approximately 30,000 gallons, and one jet fuel tank approximately 12,000 gallons (NSPS, 40 CFR, Part 60, Subpart Ka and Kb).

II.A.26 **Building 350 (Carpentry Shop)**

One Carpentry Shop dust collector.

II.B Requirements and Limitations

II.B.1 **Site-wide Limitations and Test Procedures**

II.B.1.a U of U shall burn #2 diesel/fuel oil or better in all equipment permitted for diesel/fuel oil combustion. [R307-401]

II.B.1.b Unless stated otherwise in this AO, emergency generators shall be used for electricity production only during periods when electric power from the utilities is interrupted. [R307-401]

II.B.2 **Unit Specific Limitations and Test Procedures**

II.B.2.a The following consumption limits shall not be exceeded:

- A. 165 MM Standard Cubic Feet (SCF) of natural gas per rolling 12-month period for the Student Housing-and Rice-Eccles Stadium Natural Gas-fired Equipment-Buildings 32 & 33.
- B. 858 MM SCF of natural gas per rolling 12-month period for boilers 1, 2 & 3 in Building 302.
- C. 698 MM SCF of natural gas per rolling 12-month period for boilers 3, 4 & 5 in Building 303 Boilers before the cogeneration unit becomes operational.
- D. 25 MM SCF of natural gas per rolling 12-month period for boilers 3, 4 & 5 in Building 303 Boilers after the cogeneration unit becomes operational.
- E. 281 MM SCF of natural gas per rolling 12-month period for the natural gas duct burner at the Building 303 High Temperature Water Plant cogeneration unit.
- F. 212.1 MM SCF per rolling 12-month period for the all the boilers in Huntsman Cancer Institute, Building 555.

- G. 200 MM SCF of natural gas per rolling 12-month period for the University Hospital Boilers (Buildings 521/525/526/532), and Miscellaneous Equipment (including two 13.5 MMBtu/hr boilers in Building 587, one 8.4 MMBtu/hr boiler in Building 853, and one 8.2 MMBtu/hr boiler in Building 523, but does not include cogeneration unit). [R307-401]

II.B.2.b Fuel for the following sources shall be limited to natural gas with the exception of fuel oil combusted during maintenance firings, boiler systems and natural gas pipe lines maintenance and repair and for periods of natural gas curtailment:

- A. University Hospital boilers
- B. Building 302 boilers 1-3
- C. Building 555 - Huntsman Cancer Institute - Small Boilers
- D. Building 555 - Huntsman Cancer Institute - NSPS Boilers
- E. Fuel usage for boilers 1-2 at Building 556 - Huntsman Cancer Hospital boilers 1-2.

Natural gas curtailment is defined as a period when the natural gas supplier imposes a curtailment or interruption of service, and the curtailment is involuntary and beyond the control of the U of U. Maintenance firings shall not exceed one percent of the previous year's Btu production. In addition, maintenance firings shall be scheduled between March 1st and October 31st. [R307-401]

II.B.2.c Visible emissions from the following emission points shall not exceed the following values:

10% opacity for the following sources:

- 1) Natural gas fired boilers
- 2) High Temperature Water plant
- 3) Gasoline fired equipment
- 4) Natural gas fired equipment
- 5) Building 350 Carpentry Shop dust collector
- 6) Paint Booth
- 7) Miscellaneous equipment

20% opacity for the following sources:

- 1) Incinerator
- 2) Diesel fired equipment

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-401]

II.B.2.d Emissions to the atmosphere at all times from the indicated emission point(s) shall not exceed the following rates and concentrations:

Building 303 High Temperature Water Plant Boilers 3, 4 and 5
(Before the Cogeneration Unit is operational)

Pollutant	lb/hr	ppmdv (3% O ₂ dry)
NO _x	25.0	187

Building 303 natural gas fired gas turbine only (3-test run average)
(After the Cogeneration Unit is operational)

Pollutant	lb/hr	ppmdv (15% O ₂ dry)
NO _x	2.65	9
CO	4.48	25

Building 303 natural gas fired gas turbine and WHRU duct burner (3-test run average)
(After the Cogeneration Unit is operational)

Pollutant	lb/hr	ppmdv (15% O ₂ dry)
NO _x	8.97	15
CO	10.84	30 . [R307-401]

II.B.2.e

Stack testing to show compliance with the emission limitations stated in the above condition shall be performed as specified below:

A. Emissions Point	Pollutant	Testing Status	Test Frequency
Building 303 boilers 3, 4 & 5	NO _x	*	@
Building 303 natural gas turbine only	NO _x	**	@ @
	CO	**	@ @
Building 303 natural gas turbine and WHRU duct burner	NO _x	**	@ @
	CO	**	@ @

B. Testing Status

* The initial testing has already been performed.

** Initial compliance testing for natural gas turbine, and initial compliance testing natural gas turbine and duct burner are required. The initial test date shall be performed within 60 days after achieving the maximum heat input capacity

production rate at which the affected facility will be operated and in no case later than 180 days after the initial start up of a new emission source.

@ The test shall be performed at least every 3 years based on the date of the last stack test until the Cogeneration Unit is operational.

@@ Test at least every year based on the date of the last stack test

C. Notification

At least 30 days prior to conducting stack testing, the U of U shall notify the Executive Secretary of the date, time and place of such testing. A source test protocol shall be submitted along with the testing notification sent to the Executive Secretary. The source test protocol shall be approved by the Executive Secretary prior to testing. The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used.

A pretest conference shall be held, if directed by the Executive Secretary. The pretest conference shall include representation from the U of U, the tester, and the Executive Secretary.

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status.

D. 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.

E. Volumetric Flow Rate

40 CFR 60, Appendix A, Method 2 or other testing methods approved by the Executive Secretary.

F. NO_x

40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, 7E, or other testing methods approved by the Executive Secretary.

G. CO

40 CFR 60, Appendix A, Method 10, or other testing methods approved by the Executive Secretary.

H. Calculations

To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary, to give the results in the specified units of the emission limitation. [R307-401]

I. New Source Operation

For a new source/emission point, the production rate during all compliance testing shall be no less than 90% of the production rate listed in this AO. If the maximum AO allowable production rate has not been achieved at the time of the test, the following procedure shall be followed:

- 1) Testing shall be at no less than 90% of the production rate achieved to date.
- 2) If the test is passed, the new maximum allowable production rate shall be 110% of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.
- 3) The owner/operator shall request a higher production rate when necessary. Testing at no less than 90% of the higher rate shall be conducted. A new maximum production rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum AO production rate is achieved.

J. Existing Source Operation

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. [R307-401]

II.B.2.f The Building 565 Boiler at Emma-Eccles-Jones Medical Research Center shall only be used during maintenance firing and during periods when high temperature water from Building 302 is unavailable. [R307-401]

II.B.3 **Federal Limitations and Requirements**

II.B.3.a If the U of U supplies more than one third of the gas turbine potential electrical output capacity to any power distribution system for sale, the turbine will be considered as a utility unit and as such will be classified as an unaffected unit by the Acid Rain Program regulations, except for 40 CFR 72.2 through 72.7 and 72.10 through 72.13. An Acid Rain permit would not be required, nor acid rain emission monitoring and reporting, but the source will be subject to submittal of a New Unit Exemption form to the permitting authority by the end of first calendar year for which the exemption is to apply. [R307-401]

II.B.4 **Incinerator**

II.B.4.a The U of U shall verify exemption from R307-222 (Emissions Standards: Existing Incinerator for Hospital, Medical, Infectious Wastes) by keeping readily accessible records demonstrating that only pathological, low-level radioactive, and chemotherapeutic wastes, or combination of those wastes, are being incinerated. Records shall be maintained for a minimum of five years from the date of usage on the Incinerator. [R307-401]

II.B.5 **Conditions on Paint Booth and Print Plant**

II.B.5.a Combined emissions of VOC from the Paint Booth and Print Plant shall not exceed five (5) tons per rolling 12-month period. Combined HAP emissions from the Paint Booth and Print Plant shall not exceed one (1) ton per rolling 12-month period. HAP and VOC emissions shall be calculated on a rolling 12-month total. Based on the first day of each month, a new 12-month total shall be calculated using data from the previous twelve months. Monthly calculations shall be made no later than 20 days after the end of each calendar month.

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

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

$$\text{VOC} = \frac{\% \text{ VOC by Weight}}{(100)} \times [\text{Density (lb)}] \times \text{Gal Consumed} \times \frac{1 \text{ ton}}{2000 \text{ lb}}$$

$$\text{HAP} = \frac{\% \text{ HAP by Weight}}{(100)} \times [\text{Density (lb)}] \times \text{Gal Consumed} \times \frac{1 \text{ ton}}{2000 \text{ lb}}$$

- F. The total amount of VOC and HAP emitted monthly from all materials used.
- G. The amount of VOC and HAP reclaimed for the month shall be similarly quantified and subtracted from the quantities calculated above, to provide the monthly total VOC and HAP emissions. [R307-401]

II.B.5.b Conditions on Print Plant

- A. Solvent wiping cloths shall be kept in covered containers when not in use.

- B. Solvents containing volatile organic compounds (VOC) shall be kept in covered containers when not in use. [R307-401]

II.B.6 **Building 350-Carpentry Shop Dust Collector**

- II.B.6.a The carpentry shop dust collector shall not exceed 1043 hours of operation per rolling 12-month period. [R307-401]

Section III: APPLICABLE FEDERAL REQUIREMENTS

In addition to the requirements of this AO, all applicable provisions of the following federal programs have been found to apply to this installation. This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including UAC R307.

- NSPS (Part 60), K: Petrol Storage Vessel 6/11/73~5/19/78
- NSPS (Part 60), Kb: VolatLiq/PetroStorageVessel 7/23/84
- NSPS (Part 60), KKKK: Stationary Combustion Turbines
- MACT (Part 63), ZZZZ: Recipro. Int. Comb Engine (RICE)
- NSPS (Part 60), IIII: Stationary Comp/Ignit R.I.C.E
- NSPS (Part 60), Dc: Small Indus Com InstitmSteamGenratr
- NSPS (Part 60), Ka: PetrolStorageVessel 5/18/78~7/23/84

PERMIT HISTORY

The final AO will be based on the following documents:

- | | |
|--------------|---|
| Incorporates | Additional Information dated September 17, 2009 |
| Incorporates | Additional Information dated September 16, 2009 |
| Incorporates | Additional Information dated September 3, 2009 |
| Incorporates | Additional Information dated August 13, 2009 |
| Incorporates | Additional Information dated August 12, 2009 |
| Incorporates | Additional Information dated August 7, 2009 |
| Incorporates | Additional Information dated August 6, 2009 |
| Incorporates | Additional Information dated August 6, 2009 |
| Incorporates | NOI dated June 29, 2009 |
| Incorporates | Additional Information dated June 23, 2009 |
| Supersedes | DAQE-AN0103540019-08 dated November 19, 2008 |

ACRONYMS

The following lists commonly used acronyms and their associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by EPA to classify sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CO	Carbon monoxide
COM	Continuous opacity monitor
DAQ	Division of Air Quality (typically interchangeable with UDAQ)
DAQE	This is a document tracking code for internal UDAQ use
EPA	Environmental Protection Agency
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
MACT	Maximum Achievable Control Technology
MMBTU	Million British Thermal Units
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO _x	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM ₁₀	Particulate matter less than 10 microns in size
PM _{2.5}	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
SO ₂	Sulfur dioxide
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
UAC	Utah Administrative Code
UDAQ	Utah Division of Air Quality (typically interchangeable with DAQ)
VOC	Volatile organic compounds