



State of Utah

GARY R. HERBERT
Governor

SPENCER J COX
Lieutenant Governor

Department of
Environmental Quality

Alan Matheson
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

Document Date: 09/01/2017



DAQ-2017-011845

DAQE-AN154460001-17

September 1, 2017

Jay Vance
Stericycle Incorporated
28161 North Keith Drive
Lake Forest, IL 60045

Dear Mr. Vance:

Re: Approval Order: New Approval Order for Hospital, Medical, and Infectious Waste Incinerator Facility
Project Number: N15446-0001

The attached document is the Approval Order for the above-referenced project. Future correspondence on this Approval Order should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. The project engineer for this action is Jon L Black, who may be reached at (801) 536-4047.

Sincerely,

Bryce C. Bird
Director

BCB:JB:kw

cc: Patrick Wauters
Tooele County Health Department

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

**APPROVAL ORDER: New Approval Order for Hospital, Medical,
and Infectious Waste Incinerator Facility**

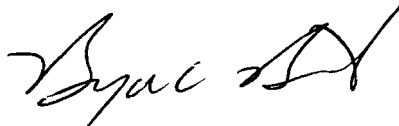
Prepared By: Jon L Black, Engineer
Phone: (801) 536-4047
Email: jlblack@utah.gov

APPROVAL ORDER NUMBER

DAQE-AN154460001-17

Date: September 1, 2017

Stericycle Incorporated
Tooele County Facility
Source Contact:
Jay Vance
Phone: (801) 936-1260 Ext 17
Email: jay.vance@stericycle.com



Bryce C. Bird
Director

Abstract

Stericycle, Inc., (Stericycle) has requested an AO for a proposed new hospital, medical, and infectious waste incinerator (HMIWI) facility. The new facility will be located at 9250 Rowley Road, Tooele, Utah. The proposal requests operation of a HMIWI facility capable of processing 4,100 pounds per hour total of hospital/medical/infectious waste. Each HMIWI unit will consist of a natural gas fired two stage combustion system, an air pollution control system consisting of a selective non-catalytic reduction system (SNCR), waste heat boiler, evaporative cooler, carbon injection system, dry sorbent injection system, baghouse, wet gas absorber, and a carbon bed system. Additionally an emergency generator, dry sorbent silo with bin vent and tub washer will be operated at the facility. Waste delivery, processing, and unloading activities will also take place at the HMIWI facility.

Stericycle's Tooele facility will be located in Tooele County, parts of which are nonattainment for PM_{2.5} and SO₂. The location of the proposed facility is outside the NAA of Tooele County. The proposed facility is located within an attainment area for all criteria pollutants. NSPS 40 CFR 60 Subparts A, Ec, and III regulations apply. MACT 40 CFR 63 Subparts A and ZZZZ regulations apply to this source. Title V of the 1990 CAA applies to this source. The Title V Operating Permit program applies to the HMIWI facility.

The controlled PTE emissions, in TPY, will be as follows: Particulate Matter = 1.94, PM₁₀ (Subset of PM) = 1.94, PM_{2.5} (Subset of PM₁₀) = 1.94, NO_x = 28.31, SO₂ = 2.36, CO = 1.93, VOC = 1.06, Total HAPs = 2.08 and CO_{2e} = 47,316.89.

This air quality AO authorizes the project with the following conditions and failure to comply with any of the conditions may constitute a violation of this order. This AO is issued to, and applies to the following:

Name of Permittee:
Stericycle Incorporated
28161 North Keith Drive
Lake Forest, IL 60045

Permitted Location:
Tooele County Facility
9250 Rowley Road
Tooele, UT 84029

UTM coordinates: 354,053.5 m Easting, 4,523,486.7 m Northing, UTM Zone 12
UTM Datum: NAD83
SIC code: 4953 (Refuse Systems)

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 Director or Director's representative upon request, and the records shall include the five-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 five (5) years. [R307-401-8]
- 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 Director 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 UAC R307-107. General Requirements: Breakdowns. [R307-107]
- I.7 The owner/operator shall comply with UAC R307-150 Series. Emission Inventories. [R307-150]

Section II: SPECIAL PROVISIONS

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

II.A.1 Tooele HMIWI Facility

II.A.2 Two (2) HMIWI Units

Maximum Equipment Rating: 2,050 pounds per hour (lbs/hr) per unit
 Combustion System: Two-Stage
 Fuel Type: Natural Gas

Each unit is equipped with natural gas-fired auxiliary burners, a bypass stack; automated waste feed system and ash removal system.

II.A.3 APC System - Two Selective Non-Catalytic Reduction

SNCR Reagent: Ammonia, Urea, or Equivalent
 Equipment Purpose: NO_x Reduction

II.A.4 APC System - Two (2) Waste Heat Boilers

Waste Heat Boiler and Associated Evaporative Cooler
 Equipment Purpose: Reduce Flue Gas Temperature

II.A.5 APC System - Two (2) Carbon Injection Systems

Carbon Injection System
 Equipment Purpose: Reduction of Dioxin/Furans

II.A.6 APC System - Two (2) Dry Sorbent Injection Systems

System Consists of the Following:

One (1) Storage Silo
 Maximum Silo Capacity: TBD upon plant construction.
 Particulate Control on Silo: Bin vent filter
 Material Stored: Sodium Bicarbonate, Lime, or Equivalent
 Equipment Purpose: Flue Gas Neutralization

II.A.7 APC System - Two (2) Baghouses

Maximum Flow Rate: 13,800 acfm

Cleaning Mechanism: Pulse Jet
Equipment Purpose: Particulate/PM₁₀/PM_{2.5} Control

II.A.8 APC System - Two (2) Wet Gas Absorbers

Maximum Flow Rate: 11,600 acfm
Maximum Liquid Injection Rate: 200 gallons per minute (gpm)
Equipment Purpose: Absorption of Acid Gases

II.A.9 APC System - Two (2) Carbon Bed Units

Maximum Flow Rate: 10,000 acfm
Number of Beds per Unit: 2
Equipment Purpose: Polishing Mercury Reduction

II.A.10 One (1) Generator

Maximum Equipment Rating: 500 kW
Engine Type: Tier 4i
Fuel Type: Diesel

II.A.11 Tub Washer

Equipment Purpose: Utilizes steam from waste heat boiler to clean reusable waste containers.

Noted for informational purposes only.

II.B Requirements and Limitations

II.B.1 The Tooele County Stericycle Hospital, Medical, and Infectious Waste Incineration Facility shall abide by the following Site-wide Requirements

II.B.1.a The owner/operator shall submit documentation of the status of construction or modification to the Director within 18 months from the date of this AO. This AO may become invalid if construction is not commenced within 18 months from the date of this AO or if construction is discontinued for 18 months or more. To ensure proper credit when notifying the Director, send the documentation to the Director, attention: NSR Section. [R307-401-18]

II.B.1.b The owner/operator shall operate in accordance with 40 CFR 60 Subpart Ec (Standards of Performance for New Stationary Sources: Hospital/Medical/Infectious Waste Incinerators). All requirements of 40 CFR 60 Subpart Ec including but not limited to Emissions Limits, Operator Training and Qualifications, Siting, Waste Management Plan, Compliance and Performance Testing, Monitoring, Reporting, and Recordkeeping, shall apply at all times of source operation. [40 CFR 60 Subpart Ec]

II.B.1.c The owner/operator shall process a maximum of 4,100 pounds per hour of hospital/medical/infectious waste in the two (2) HMIWI units at this facility. Records of the waste feed weight and rate shall be kept at all times of each HMIWI unit operation and made available to the Director upon request. [R307-401-8]

II.B.1.d The owner/operator shall operate the HMIWI below the maximum charge rate on a 3-hour rolling average basis. The maximum charge rate is defined as 110% of the lowest 3-hour average charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limits. Records of the waste feed rate shall be kept at all times of incinerator operation and made available to the Director upon request. [40 CFR 60 Subpart Ec, R307-401-8]

II.B.1.e Residence time of the gas in the secondary chamber will be designed to be at least 2 seconds above 1,800 degrees F. The minimum secondary chamber temperature will be established during performance testing. The secondary chamber temperature shall be monitored and recorded at all times of each HMIWI unit operation. The records shall be made available to the Director upon request. [R307-401-8]

II.B.1.f Emissions to the atmosphere from the indicated emission points shall not exceed the following rates and concentrations. The emission limitations apply to the HMIWI units operations at all times.

Source: Each Incinerator Emission Control System Exhaust Stack (ST01/ST02)

Pollutant	Units (7% Oxygen, dry basis)	Limit
Particulate Matter	Milligrams per dry standard cubic meter (mg/dscm)	18
	Grains per dry standard cubic foot (gr/dscf)	0.0080
Carbon Monoxide	Parts per million by volume (ppmv)	11
Dioxin/Furans	Nanograms per dry standard cubic meter total dioxin/furans (ng/dscm)	9.3
	Grains per billion dry standard cubic feet (gr/10 ⁹ dscf)	4.1
or;		
	ng/dscm TEQ	0.035
	gr/10 ⁹ dscf TEQ	0.015
Hydrogen Chloride	ppmv	5.1
Sulfur Dioxide	ppmv	8.1
Nitrogen Oxides	ppmv	140
Lead	mg/dscm	0.00069
	grains per thousand dry standard cubic feet (gr/10 ³ dscf)	0.00030
Cadmium	mg/dscm	0.00013
	gr/10 ³ dscf	0.000057
Mercury	mg/dscm	0.0013
	gr/10 ³ dscf	0.00057

[40 CFR 60 Subpart Ec]

II.B.1.g An initial stack test to show compliance with the emission limitations stated in Condition II.B.1.f shall be performed for opacity, fugitive ash, PM, CO, Dioxin/Furan, HCl, SO₂, NO_x, Pb, Cd, and Hg. The stack test shall be performed within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days of the initial startup of the HMIWI units. Subsequent stack testing shall be performed annually (no more than 12 months following the previous performance test) for opacity, fugitive ash, PM, CO, and HCl in accordance with 40 CFR 60 Subpart Ec. The annual testing frequency for PM, CO, and HCl can be reduced to once every 3 years if all 3 performance tests over a 3-year period indicate compliance with the emission limits for each of the 3 pollutants. The frequency shall return to annual testing for a particular pollutant if a performance test for that pollutant indicates noncompliance with the respective emission limit. Upon operation of

NO_x and CO CEMS as described in Condition II.B.2.a, stack testing for NO_x and CO will not be required. The use of the bypass stack during a stack test shall invalidate the stack test. [40 CFR 60 Subpart Ec]

II.B.1.h Each stack test shall consist of a minimum of three test runs conducted under representative operating conditions. When two or more pollutants are tested in a single test program Dioxin/Furan, Pb, Cd, and Hg shall be tested simultaneously, as applicable, and the minimum sample time shall be 4 hours per test run unless otherwise indicated. When two or more pollutants are tested in a single test program, PM, CO, HCl, SO₂, and NO_x shall be tested simultaneously, and the minimum sample time shall be 1 hour per test run unless otherwise indicated. All stack testing data and results shall be submitted to the Director within 60 days of the testing date(s). [40 CFR 60 Subpart Ec, R307-165, R307-401-8]

II.B.1.i Notification

The Director shall be notified at least 30 days prior to conducting any required emission testing. A source test protocol shall be submitted to DAQ when the testing notification is submitted to the Director.

The source test protocol shall be approved by the Director prior to performing the test(s). 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 Director. [R307-165]

II.B.1.j Sample Location

The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved testing method, as acceptable to 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. [R307-165]

II.B.1.k Volumetric Flow Rate

40 CFR 60, Appendix A, Method 2. [R307-165]

II.B.1.l Particulate Matter

40 CFR 60, Method 5 of Appendix A-3, 26A or 29 of Appendix A-8 or other EPA approved method as acceptable to the Director. [40 CFR 60 Subpart Ec, R307-165]

II.B.1.m CO

40 CFR 60, Method 10 or 10B of Appendix A-4 or other EPA approved method as acceptable to the Director. [40 CFR 60 Subpart Ec, R307-165]

II.B.1.n Dioxins/furans

40 CFR 60, Method 23 of Appendix A-7 or other EPA approved method as acceptable to the Director. [40 CFR 60 Subpart Ec, R307-165]

II.B.1.o Hydrogen Chloride

40 CFR 60, Method 26 or 26A of Appendix A-8 or other EPA approved method as acceptable to the Director. [40 CFR 60 Subpart Ec, R307-165]

- II.B.1.p SO₂
- 40 CFR 60, Method 6 or 6C of Appendix A-4 or other EPA approved method as acceptable to the Director. [40 CFR 60 Subpart Ec, R307-165]
- II.B.1.q NO_x
- 40 CFR 60, Method 7 or 7E of Appendix A-4 or other EPA approved method as acceptable to the Director. [40 CFR 60 Subpart Ec, R307-165]
- II.B.1.r Lead, Cadmium and Mercury
- 40 CFR 60, Method 29 of Appendix A-8 or other EPA approved method as acceptable to the Director. [40 CFR 60 Subpart Ec, R307-165]
- II.B.1.s Opacity
- 40 CFR 60, Method 9 of Appendix A-4. [40 CFR 60 Subpart Ec]
- II.B.1.t Fugitive Ash
- 40 CFR 60, Method 22 of Appendix A-7. [40 CFR 60 Subpart Ec]
- II.B.1.u Each HMIWI baghouse shall operate in accordance with the following:
- A) The designed pressure drop of each baghouse shall not be less than one (1) inches of water column or more than 10.0 inches of water column.*
 - B) The baghouse operating parameters shall be monitored with equipment located such that an inspector/operator can safely read the output any time. The pressure drop readings shall be accurate to within plus or minus 0.5 inches of water column.
 - C) All instruments shall be calibrated according to the manufacturer's instructions.
- * Any modification to the baghouse pressure drop shall be reviewed and approved in accordance with R307-401-1.
- [R307-401-8]
- II.B.1.v The owner/operator shall not allow visible emissions to exceed the following:
- A) Ash conveying system (including conveyor transfer points) - no visible emissions in excess of 5% of the observation period (i.e., 9 minutes per 3-hour period), as per 40 CFR 60.52c(c).
 - B) Each HMIWI unit emission point (following carbon bed or equivalent) - 6% opacity
 - C) All baghouse emission points - 10% opacity
 - D) Dry sorbent silo bin vent emission point - 10% opacity
 - E) All diesel generator emission points - 20% opacity

F) All other stationary point or fugitive emission sources on site - 20% opacity*

Note: The 20% opacity limitation is subject to the exemptions provided by R307-201-3(7).

[40 CFR 60 Subpart Ec, R307-201-3]

II.B.1.v.1 If the dry sorbent silo is located outdoors, a visual observation of the dry sorbent silo shall be performed once during each filling operation by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. The individual is not required to be a certified visible emissions observer (VEO). If any visible emissions are observed, filling operations shall be suspended and the dust control device as well as any associated ducting shall be inspected. Any conditions existing outside of normal operational parameters shall be corrected and filling activities may resume. Upon resumption of filling operations a 40 CFR 60, Appendix A, Method 9 opacity determination of the silo shall be performed by a certified observer.

All other opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.

For sources that are subject to NSPS, opacity shall be determined by conducting observations in accordance with 40 CFR 60.11(b) and 40 CFR 60, Appendix A, Method 9. [40 CFR 60 Subpart Ec, R307-201-3]

II.B.1.v.2 If the dry sorbent silo is located outdoors, records of visual emission observations shall be kept at all times of silo filling operations. The records shall include the date, time and visual observation value noted. All records shall be kept in accordance with Condition I.4 of this AO. [R307-401-8]

II.B.2 **The Tooele County Stericycle Hospital, Medical, and Infectious Waste Incineration Facility shall abide by the following CEMS and Parametric Monitoring Requirements**

II.B.2.a The owner/operator shall operate CEMS or other alternative monitoring approach approved by the Director to demonstrate compliance with NO_x and CO emissions limits. An O₂ monitor shall also be installed for adjusting the readings to percent O₂. Compliance with the NO_x and CO emission limits shall be demonstrated using a 24-hour block average, calculated as specified in section 12.4.1 of EPA Reference Method 19 of 40 CFR 60 Appendix A-7. While the affected emission unit is operating, hourly NO_x and CO emission rates expressed in ppmv shall be determined in accordance with R307-170 using the appropriate conversion factors. The CEMS shall be installed and operating no later than 18 months from the issuance date of this AO or upon startup of the HMIWIs if more than 18 months from the issuance date of this AO, unless an approved alternative is implemented. Prior to the installation and operation of the NO_x and CO CEMS, compliance with the NO_x and CO emissions limits shall be demonstrated by maintaining the minimum and maximum operating parameters identified in Conditions II.B.2.b and II.B.2.c.1 in accordance with 40 CFR 60 Subpart Ec. CEMS shall be installed, calibrated, operated, and maintained in accordance with R307-170. [R307-170]

II.B.2.b Prior to the installation and operation of the CO CEMS, as described in Condition II.B.2.a, operating above the maximum charge rate (3-hour rolling average) and below the minimum secondary chamber temperature (3-hour rolling average) simultaneously constitutes a violation of the CO emissions limit. [40 CFR 60 Subpart Ec, R307-401-8]

II.B.2.c The SNCR system shall inject ammonia, urea or an equivalent reagent into each of the HMIWI unit's secondary chambers exhaust stream prior to the exhaust gas being fed into the waste heat boilers. All equivalent reagents shall be approved by the Director. [R307-401-8]

- II.B.2.c.1 The owner/operator shall establish the minimum reagent flow rate based on performance testing. The minimum reagent flow rate means 90% of the highest 3-hour average injection rate (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the NO_x emission limit. Prior to the installation and operation of the NO_x CEMS, as described in Condition II.B.2.a, operating above the maximum charge rate (3-hour rolling average), below the minimum secondary chamber temperature (3-hour rolling average), and below the minimum reagent flow rate (3-hour rolling average) simultaneously constitutes a violation of the NO_x emissions limit. [40 CFR 60 Subpart Ec, R307-401-8]
- II.B.2.c.2 The owner/operator shall record the amount and type of NO_x reagent used during each hour of operation. [40 CFR 60 Subpart Ec, R307-401-8]
- II.B.2.d The owner/operator shall obtain CEMS monitoring data at all times during HMIWI operation in accordance with 40 CFR 60.13. The owner/operator shall monitor and record all emissions data during all phases of source operations, including start-ups, shutdowns, and process malfunctions. Monitor availability shall be defined in UAC R307-170. [40 CFR 60, R307-170]
- II.B.2.e The owner/operator shall obtain continuous process operations monitoring data at all times during HMIWI operation in accordance with 40 CFR 60 Subpart Ec. The owner/operator shall obtain continuous process operations monitoring data at all times during HMIWI operation except during periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be obtained for 75% of the operating hours per day for 90% of the operating days per calendar quarter that the affected facility is combusting hospital waste and/or medical/infectious waste in accordance with 40 CFR 60.57c(e). [40 CFR 60 Subpart Ec]
- II.B.2.f The owner/operator shall establish or reestablish site-specific operating parameter values, as applicable, according to the definition of each operating parameter pursuant to 40 CFR 60.51c, upon submittal of performance test results demonstrating compliance with the applicable emissions limits in 40 CFR 60 Subpart Ec, but no later than 60 days following the performance test. [40 CFR 60 Subpart Ec]
- II.B.3 **Diesel Generator Requirements**
- II.B.3.a The diesel generator shall not exceed 300 hours of operation per rolling 12-month period. [R307-401-8]
- II.B.3.a.1 To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total for each day of the previous month by the 20th day of each month using data from the previous 12 months. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log for the generator. [R307-401-8]
- II.B.3.b The sulfur content of any diesel burned shall not exceed 0.0015% by weight. [40 CFR 63 Subpart ZZZZ, R307-203-1]
- II.B.3.c For each delivery of fuel, the permittee shall either:
- (a) Determine the fuel sulfur content expressed as wt% in accordance with the methods of the American Society for Testing Materials (ASTM); or
 - (b) Inspect the fuel sulfur content expressed as wt% determined by the vendor using methods of the ASTM; or

- (c) Inspect documentation provided by the vendor that indirectly demonstrates compliance with this provision.

[R307-201-3]

- II.B.3.d All emissions from the diesel engine generators shall be vented vertically unrestricted.
[R307-410]

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), A: General Provisions

NSPS (Part 60), Ec: Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996

NSPS (Part 60), IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

MACT (Part 63), A: General Provisions

MACT (Part 63), ZZZZ: NESHAP for Stationary Reciprocating Internal Combustion Engines

PERMIT HISTORY

This AO is based on the following documents:

Is Derived From	NOI Document dated February 26, 2015
Incorporates	Additional Information dated June 5, 2015
Incorporates	Additional Information dated September 23, 2015
Incorporates	Additional Information dated October 8, 2015
Incorporates	Additional Information dated January 28, 2016

ADMINISTRATIVE CODING

The following information is for UDAQ internal classification use only:

Tooele County

CDS B

MACT (Part 63), Attainment Area, NSPS (Part 60)

ACRONYMS

The following lists commonly used acronyms and 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
CMS	Continuous monitoring system
CO	Carbon monoxide
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent - 40 CFR Part 98, Subpart A, Table A-1
COM	Continuous opacity monitor
DAQ/UDAQ	Division of Air Quality
DAQE	This is a document tracking code for internal UDAQ use
EPA	Environmental Protection Agency
FDCP	Fugitive dust control plan
GHG	Greenhouse Gas(es) - 40 CFR 52.21 (b)(49)(i)
GWP	Global Warming Potential - 40 CFR Part 86.1818-12(a)
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
LB/HR	Pounds per hour
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
PTE	Potential to Emit
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
TPY	Tons per year
UAC	Utah Administrative Code
VOC	Volatile organic compounds