

Statement of Basis

**Permit to Construct No. P-2009.0088
Project ID 61522**

**City of Meridian Wastewater Treatment Plant
Meridian, Idaho**

Facility ID 001-00228

Final

August 24, 2015

Kelli Wetzel

Permit Writer

KW

The purpose of this Statement of Basis is to satisfy the requirements of IDAPA 58.01.01. et seq, Rules for the Control of Air Pollution in Idaho, for issuing air permits.

ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE	3
FACILITY INFORMATION	5
Description	5
Permitting History	5
Application Scope	5
Application Chronology	6
TECHNICAL ANALYSIS	7
Emissions Units and Control Equipment	7
Emissions Inventories.....	9
Ambient Air Quality Impact Analyses	9
REGULATORY ANALYSIS.....	9
Attainment Designation (40 CFR 81.313).....	9
Permit to Construct (IDAPA 58.01.01.201).....	9
Tier II Operating Permit (IDAPA 58.01.01.401)	9
Title V Classification (IDAPA 58.01.01.300, 40 CFR Part 70).....	10
PSD Classification (40 CFR 52.21).....	10
NSPS Applicability (40 CFR 60)	10
NESHAP Applicability (40 CFR 61)	10
MACT Applicability (40 CFR 63)	10
Permit Conditions Review.....	14
PUBLIC REVIEW.....	15
Public Comment Opportunity.....	15
APPENDIX A – FACILITY DRAFT COMMENTS.....	16
APPENDIX B – PROCESSING FEE.....	18

ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

AAC	acceptable ambient concentrations
AACC	acceptable ambient concentrations for carcinogens
acfm	actual cubic feet per minute
ASTM	American Society for Testing and Materials
Btu	British thermal units
CAA	Clean Air Act
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CI	compression ignition
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	CO ₂ equivalent emissions
DEQ	Department of Environmental Quality
dscf	dry standard cubic feet
EL	screening emission levels
EPA	U.S. Environmental Protection Agency
gr	grains (1 lb = 7,000 grains)
HAP	hazardous air pollutants
hp	horsepower
hr/yr	hours per consecutive 12 calendar month period
ICE	internal combustion engines
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	kilometers
lb/hr	pounds per hour
m	meters
MACT	Maximum Achievable Control Technology
MMBtu	million British thermal units
MMscf	million standard cubic feet
NAAQS	National Ambient Air Quality Standard
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
NSPS	New Source Performance Standards
O&M	operation and maintenance
O ₂	oxygen
PC	permit condition
PM	particulate matter
PM _{2.5}	particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers
PM ₁₀	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
ppm	parts per million
PSD	Prevention of Significant Deterioration
PTC	permit to construct
PTC/T2	permit to construct and Tier II operating permit
PTE	potential to emit
RICE	reciprocating internal combustion engines
<i>Rules</i>	<i>Rules for the Control of Air Pollution in Idaho</i>
scf	standard cubic feet
SCL	significant contribution limits
SIP	State Implementation Plan
SM	synthetic minor

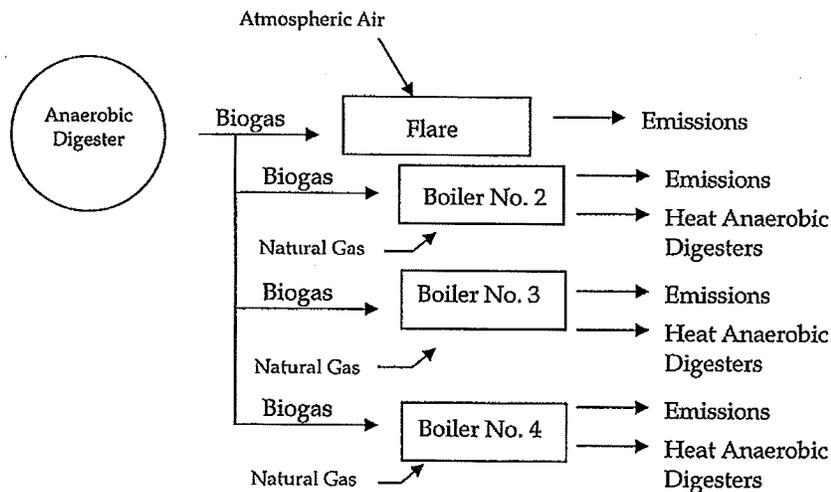
SM80	synthetic minor facility with emissions greater than or equal to 80% of a major source threshold
SO ₂	sulfur dioxide
SO _x	sulfur oxides
T/day	tons per calendar day
T/hr	tons per hour
T/yr	tons per consecutive 12 calendar month period
T2	Tier II operating permit
TAP	toxic air pollutants
ULSD	ultra-low sulfur diesel
U.S.C.	United States Code
VOC	volatile organic compounds
yd ³	cubic yards
µg/m ³	micrograms per cubic meter

FACILITY INFORMATION

Description

The City of Meridian Waste Water Division operates a wastewater treatment plant (WWTP) to manage and treat municipal wastewater for the City of Meridian. Four diesel powered generators located in the generator building (Building 8) supply emergency backup power to the entire WWTP facility. Three boilers are located within the WWTP facility: Building No.18 (Boiler 2), and Building No. 20 (Boilers 3 and 4). Boilers No.2 through 4 use biogas as the primary fuel and natural gas as the secondary fuel. Excess biogas is combusted at the candlestick flare. In addition, seven natural gas heaters are used throughout the facility for comfort heating and air conditioning purposes.

Biogas is a byproduct of the anaerobic digesters with a composition of 55 to 60-percent methane (CH₄), 40 to 45-percent carbon dioxide (CO₂), and less than 1-percent hydrogen sulfide (H₂S). Biogas generated from the anaerobic digesters is collected and piped to the candlestick flare where it is mixed with atmospheric oxygen and combusted. Prior to the flare, a portion of the biogas is diverted to any one of three boilers located within the WWTP facility (Boilers No. 2, 3 and 4). The biogas will be combusted in the boilers to produce heat for use in the anaerobic digesters. Below is a process flow diagram of the biogas combustion process.



Permitting History

The following information was derived from a review of the permit files available to DEQ. Permit status is noted as active and in effect (A) or superseded (S).

September 24, 2009 P-2009.0088, Initial PTC for a wastewater treatment plant, Permit status (A, but will become S upon issuance of this permit)

Application Scope

This PTC is a revision of an existing PTC.

The applicant has proposed to:

- Remove Anaerobic Digesters #1 and #2 from the list of regulated sources. These two digesters have been repurposed as fermenters.
- Remove Boiler #1 from the list of regulated sources. The boiler and all peripherals and piping have been physically removed.

- Allow monthly monitoring using Draeger tubes in lieu of the H₂S monitor during reduced monitoring frequencies.

Application Chronology

May 12, 2015	DEQ received an application and an application fee.
June 10, 2015	DEQ determined that the application was complete.
June 29, 2015	DEQ made available the draft permit and statement of basis for peer and regional office review.
July 6, 2015	DEQ made available the draft permit and statement of basis for applicant review.
August 18, 2015	DEQ received the permit processing fee.
August 24, 2015	DEQ issued the final permit and statement of basis.

TECHNICAL ANALYSIS

Emissions Units and Control Equipment

Table 1 EMISSIONS UNIT AND CONTROL EQUIPMENT INFORMATION

Source ID No.	Source Description	Control Equipment
Anaerobic Digesters #3, #4, and #5	Capacity #3: 507,000 gallons Capacity #4 & 5: 750,000 gallons Biogas production: 120,000 cubic feet per day Construction Date #3: 2000 Construction Date #4 & #5: 2008	<u>Candlestick Flare:</u> Manufacturer: Varec Biogas Model: VB86042 Installation Date: 2000
Boiler #2	Manufacturer: Kewanee Model: M-265 KG Serial Number: SFD72753 Construction Date: 1999 Rated Capacity: 3.31 MMBtu/hr Fuel Type: Primary: Biogas Secondary: NG Heat Content: 650 Btu/scf Biogas 1020 Btu/scf NG	None
Boiler #3	Manufacturer: Cleaver Brooks Model: CB700 X-60 Serial Number: OL 105735 Construction Date: 2008 Rated Capacity: 2.511 MMBtu/hr Fuel Type: Primary: Biogas Secondary: NG Heat Content: 650 Btu/scf Biogas 1020 Btu/scf NG	None
Boiler #4	Manufacturer: Cleaver Brooks Model: CB700 X-60 Serial Number: OL 105736 Construction Date: 2008 Rated Capacity: 2.511 MMBtu/hr Fuel Type: Primary: Biogas Secondary: NG Heat Content: 650 Btu/scf Biogas 1020 Btu/scf NG	None
Generator #1	Manufacturer: Caterpillar Model: 3412 C27 ACERT Serial Number: DJN00541 Construction Date: 2005 Model Year: 2005 Rated Power: 800 kW Ignition Type: Compression Fuel Type: Distillate #2 Fuel consumption: 58.6 gal/hr Actual fuel: 46.5 gal/hr Sulfur content: 0.5%	None

Source ID No.	Source Description	Control Equipment
Generator #2	Manufacturer: Caterpillar Model: 3412 C27 ACERT Serial Number: DJN00542 Construction Date: 2005 Model Year: 2005 Rated Power: 800 kW Ignition Type: Compression Fuel Type: Distillate #2 Fuel consumption: 58.6 gal/hr Actual fuel: 46.5 gal/hr Sulfur content: 0.5%	None
Generator #3	Manufacturer: Caterpillar Model: 3412 C27 ACERT Serial Number: DJN00911 Construction Date: 2007 Model Year: 2007 Rated Power: 800 kW Ignition Type: Compression Fuel Type: Distillate #2 Fuel consumption: 58.6 gal/hr Actual fuel: 46.5 gal/hr Sulfur content: 0.5%	None
Generator #4	Manufacturer: Caterpillar Model: 3412 C27 ACERT Serial Number: DJN00912 Construction Date: 2007 Model Year: 2007 Rated Power: 800 kW Ignition Type: Compression Fuel Type: Distillate #2 Fuel consumption: 58.6 gal/hr Actual fuel: 46.5 gal/hr Sulfur content: 0.5%	None
Heater #1	Manufacturer: Renzor Model: Series 100 Model F Construction Date: 1979 Max Capacity: 125,000 Btu/hr Fuel Type: Natural gas	None
Heater #2	Manufacturer: Renzor Model: Series 100 Model F Construction Date: 1978 Max Capacity: 125,000 Btu/hr Fuel Type: Natural gas	None
HVAC #1	Manufacturer: Hastings Model: HRCH-4 Construction Date: 1978 Max Capacity: 100,000 Btu/hr Fuel Type: Natural gas	None

Source ID No.	Source Description	Control Equipment
HVAC #2	Manufacturer: Hastings Model: HR-MUB-500V Construction Date: 2007 Max Capacity: 500,000 Btu/hr Fuel Type: Natural gas	None
HVAC #3	Manufacturer: Hastings Model: HR-MUB-500V Construction Date: 2007 Max Capacity: 500,000 Btu/hr Fuel Type: Natural gas	None
HVAC #4/5	Manufacturer: Renzor Model: RDF2-80-3 Construction Date: 2003 Max Capacity: 500,000 Btu/hr Fuel Type: Natural gas	None
HVAC #6	Manufacturer: Renzor Model: RDF2-80-3 Construction Date: 2003 Max Capacity: 500,000 Btu/hr Fuel Type: Natural gas	None

Emissions Inventories

Since this proposed project is for a revised PTC to discontinue the use of Boiler No. 1, emissions will not increase as a result of the issuance of this permit. For a complete emission inventory, please refer to the Statement of Basis issued September 24, 2009. All emission rates and limits in the existing PTC are carried over with no change in emissions rates as a result of this permitting action.

Ambient Air Quality Impact Analyses

Emissions will not increase as a result of this permitting action, thus the ambient impact analysis is not required.

REGULATORY ANALYSIS

Attainment Designation (40 CFR 81.313)

The facility is located in Ada County, which is designated as attainment or unclassifiable for PM_{2.5}, PM₁₀, SO₂, NO₂, CO, and Ozone. Refer to 40 CFR 81.313 for additional information.

Permit to Construct (IDAPA 58.01.01.201)

IDAPA 58.01.01.201Permit to Construct Required

The permittee has requested that a PTC be issued to the facility for the modified emissions source. Therefore, a permit to construct is required to be issued in accordance with IDAPA 58.01.01.220. This permitting action was processed in accordance with the procedures of IDAPA 58.01.01.200-228.

Tier II Operating Permit (IDAPA 58.01.01.401)

IDAPA 58.01.01.401Tier II Operating Permit

The application was submitted for a permit to construct (refer to the Permit to Construct section), and an optional Tier II operating permit has not been requested. Therefore, the procedures of IDAPA 58.01.01.400-410 were not applicable to this permitting action.

Title V Classification (IDAPA 58.01.01.300, 40 CFR Part 70)

IDAPA 58.01.01.301Requirement to Obtain Tier I Operating Permit

Post project facility-wide emissions from this facility do not have a potential to emit greater than 100 tons per year for criteria pollutants or 10 tons per year for any one HAP or 25 tons per year for all HAP combined. Therefore, the facility is not a Tier I source in accordance with IDAPA 58.01.01.006 and the requirements of IDAPA 58.01.01.301 do not apply.

PSD Classification (40 CFR 52.21)

40 CFR 52.21Prevention of Significant Deterioration of Air Quality

The facility is not a major stationary source as defined in 40 CFR 52.21(b)(1), nor is it undergoing any physical change at a stationary source not otherwise qualifying under paragraph 40 CFR 52.21(b)(1) as a major stationary source, that would constitute a major stationary source by itself as defined in 40 CFR 52. Therefore in accordance with 40 CFR 52.21(a)(2), PSD requirements are not applicable to this permitting action. The facility is not a designated facility as defined in 40 CFR 52.21(b)(1)(i)(a), and does not have facility-wide emissions of any criteria pollutant that exceed 250 T/yr.

NSPS Applicability (40 CFR 60)

The facility is not subject to any NSPS requirements 40 CFR Part 60.

NESHAP Applicability (40 CFR 61)

The facility is not subject to any NESHAP requirements in 40 CFR 61.

MACT Applicability (40 CFR 63)

Because the facility has four emergency engines the requirements of 40 CFR 63, Subpart ZZZZ apply to this facility.

40 CFR 60, Subpart ZZZZ.....National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

§ 63.6585 Am I subject to this subpart?

You are subject to this Subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(c) An area source of HAP emissions is a source that is not a major source.

The facility operates one four emergency engines that are used periodically throughout the year and is used in emergency situations only. The facility is an area source for HAPs.

§ 63.6590 What parts of my plant does this subpart cover?

This subpart applies to each affected source.

(a) Affected source. An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

(1) Existing stationary RICE.

(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

The four emergency engines located at the facility are considered existing as they commenced before June 12, 2006.

§ 63.6595 *When do I have to comply with the subpart?*

(a)(1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than October 19, 2013.

The four emergency engines must be in compliance with the Subpart no later than May 3, 2013.

§63.6603 *What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?*

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart that apply to you.

Table 2d applies to the four emergency engines as it applies to emergency CI RICE. Table 2d specifies that except during periods of startup, the engines are subject to changing the oil and filter every 500 hours of operation, inspecting the air cleaner every 1,000 hours of operation and replace as necessary, and inspect all hoses and belts every 500 hours of operation and replace as necessary. Each of the maintenance procedures shall occur at the indicated interval or annually, whichever occurs first.

§63.6604 *What fuel requirements must I meet if I own or operate a stationary CI RICE?*

(a) If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel.

The four emergency engines shall use diesel fuel that meets the requirements of 40 CFR 80.510(b).

§ 63.6605 *What are my general requirements for complying with this Subpart?*

(a) You must be in compliance with the emission limitations and operating limitations in this Subpart that apply to you at all times.

(b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

When operating the IC engines, they must be operated in a manner that is consistent with reducing emissions and compliance with appropriate limitations applies at all times.

§ 63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?

(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

(3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;

The four emergency engines shall be operated in accordance with manufacturer's specifications or a maintenance plan may be developed that is consistent with good air pollution control practices.

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

A non-resettable hour meter shall be installed on all four emergency engines.

(h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

Idle startup time may not exceed 30 minutes.

(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

This section allows the facility to develop their own oil analysis program to modify the oil changing frequency if the program meets all criteria set forth in subsection i of the subpart.

§ 63.6635 How do I monitor and collect data to demonstrate continuous compliance?

(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

The permittee must monitor and collect data continuously when the engines are in operation.

§ 63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations?

(a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

(f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE 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 owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(4) Emergency stationary RICE located at area sources of HAP 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 (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

The above requirements pertain to the four emergency engines at the facility.

§ 63.6655 What records must I keep?

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;

(2) An existing stationary emergency RICE.

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must 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. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

The facility needs to maintain records demonstrating that the engines are being operated in accordance with an appropriate maintenance plan. Records of operational hours from the non-resettable meter must also be kept as well as how many hours were spent in emergency situations and demand response.

§ 63.6660 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

All records must be kept by the permittee for a minimum of five (5) years for each record.

Permit Conditions Review

This section describes the permit conditions that have been added, revised, modified or deleted as a result of this permitting action.

Revised Permit Condition 2.1 and Table 2.1

The permit condition and table have been revised to refer to three anaerobic digesters and three boilers. Two digesters were repurposed and one boiler were removed from service.

Revised Permit Condition 2.3

This permit condition was revised to state that draeger tubes can be used in addition to the hydrogen sulfide monitor to demonstrate compliance with the hydrogen sulfide emission limit.

Revised Permit Condition 2.6

This permit condition has been revised to reflect three boilers as one was removed from service.

Revised Permit Condition 2.8

This permit condition has been removed to remove the reference to Boiler #1 which was removed from service.

Revised Permit Condition 2.13

This permit condition has been revised to include the ability to use draeger tubes to collect a H₂S sample when on a reduced monthly monitoring schedule.

Revised Permit Condition 2.14

This permit condition was revised to clarify the location of the biogas flow monitor.

Revised Permit Condition 2.15

This permit condition was revised to eliminate the language to develop and submit an O&M manual. This has already been completed by the permittee.

Revised Permit Condition 3.1

This permit condition was revised to state that the emergency engines are subject to 40 CFR 63, Subpart ZZZZ.

Added Permit Conditions 3.7 – 3.16

These permit conditions were established to comply with the federal requirements of 40 CFR 63, Subpart ZZZZ.

Added Permit Condition 3.17

This permit condition fully incorporates any NSPS or NESHAP into the permit.

PUBLIC REVIEW

Public Comment Opportunity

Because this permitting action does not authorize an increase in emissions, an opportunity for public comment period was not required or provided in accordance with IDAPA 58.01.01.209.04 or IDAPA 58.01.01.404.04.

APPENDIX A – FACILITY DRAFT COMMENTS

The following comments were received from the facility on August 11, 2015:

Facility Comment: PTC Section 1 under Purpose, replace removed with repurposed. Digesters #1 and #2 have not been removed but have been repurposed as fermenters.

DEQ Response: The requested change has been made.

Facility Comment: PTC Section 2 Permit Condition 2.3, please revise sentence to read “The concentration of hydrogen sulfide...based on the most recent consecutive 12-month average of all monitored values obtained by the hydrogen sulfide monitor or draeger tube sampling.”

DEQ Response: The requested change has been made.

Facility Comment: PTC Section 2 Permit Condition 2.4, please remove opacity monitoring requirement or reduce and/or define the required monitoring period and frequency.

DEQ Response: IDAPA 58.01.01.625 requires that an opacity limit be placed in the PTC. The facility’s concern is that someone needs to be observing the flare 24 hours a day. Compliance is demonstrated using EPA Method 9.

Facility Comment: PTC Section 2 Permit Condition 2.6, please remove the particulate grain standard or clarify how we shall demonstrate compliance with this requirement.

DEQ Response: IDAPA 58.01.01.677 requires that the particulate grain standard be placed in the PTC. The facility demonstrates compliance by combusting either natural gas or biogas as required by the PTC.

Facility Comment: PTC Section 2 Permit Condition 2.13, please revise sentence to read “Calibration of the H₂S monitor shall be performed and recorded in accordance with the O&M manual and no less frequently than semi-annually if the meter is in service. If the meter is out of service, the meter must be cleaned and calibrated before being put into service.”

DEQ Response: The requested change has been made.

Facility Comment: PTC Section 3 Permit Condition 3.7, please replace the sentence that begins with “Each of the maintenance procedures shall occur...” with “Each of the maintenance procedures shall occur at the indicated interval or every two years as recommended by the manufacturer, whichever comes first.”

DEQ Response: Permit Condition 3.7 is written in accordance with 40 CFR 63.6603 which is a federal requirement under the NESHAP for stationary reciprocating internal combustion engines. This requirement cannot be altered.

Facility Comment: PTC Section 3 Permit Condition 3.13, please clarify what data must be monitored and collected continuously.

DEQ Response: Permit Condition 3.13 is written in accordance with 40 CFR 63.6635. The condition requires that any data that is to be monitored and collected under the subpart be done continuously while the engine is operating. This could include hours of operation and maintenance.

Facility Comment: PTC Section 3 Permit Condition 3.14 please clarify if the emergency engine operation is limited to 45 hours per year or 50 hours per year as detailed in 40 CFR 63, Subpart ZZZZ.

DEQ Response: Permit Condition 3.3 which limits the engines to 45 hours per year and no time limit in emergency situations was an initial permit condition in 2009. Because this limit is more restrictive than the limit allowed under Subpart ZZZZ, the 50 hours per year will be removed from the permit.

APPENDIX B – PROCESSING FEE

PTC Fee Calculation

Instructions:

Fill in the following information and answer the following questions with a Y or N. Enter the emissions increases and decreases for each pollutant in the table.

Company: City of Meridian Wastewater
Address: 3401 N. Ten Mile Rd.
City: Meridian
State: Idaho
Zip Code: 83646
Facility Contact: Tracy Crane
Title: Superintendent
AIRS No.: 001-00228

- N** Does this facility qualify for a general permit (i.e. concrete batch plant, hot-mix asphalt plant)? Y/N
- Y** Did this permit require engineering analysis? Y/N
- N** Is this a PSD permit Y/N (IDAPA 58.01.01.205.04)

Emissions Inventory			
Pollutant	Annual Emissions Increase (T/yr)	Annual Emissions Reduction (T/yr)	Annual Emissions Change (T/yr)
NO _x	0.0	1.4	-1.4
SO ₂	0.0	0.01	0.0
CO	0.0	1.2	-1.2
PM10	0.0	0.1	-0.1
VOC	0.0	0.08	-0.1
TAPS/HAPS	0.0	0	0.0
Total:	0.0	2.79	-2.8
Fee Due	\$ 1,000.00		

Comments:

