STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502
www.deq.idaho.gov

C.L. "Butch" Otter, Governor
John H. Tippets, Director

November 29, 2018

Mike Kandris
Chief Operating Officer
Pacific Ethanol Magic Valley LLC
2600 Washington Avenue
Burley, Idaho 83318

RE: Facility ID No. 031 - 00032, Pacific Ethanol Magic Valley LLC, Burley
Final Permit Letter

Dear Mr. Kandris:

The Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) No. P-2009.0124 Project 62108 to Pacific Ethanol Magic Valley LLC located at Burley to allow cooling water to be used in the onsite scrubber and changing the temperature monitoring location at the regenerative thermal oxidizer. This PTC is issued in accordance with IDAPA 58.01.01.200 through 228 (Rules for the Control of Air Pollution in Idaho) and is based on the certified information provided in your PTC application received Date.

This permit is effective immediately and replaces PTC No. P-2009.0124, issued on September 25, 2014. This permit does not release Pacific Ethanol Magic Valley LLC from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances.

In order to fully understand the compliance requirements of this permit, DEQ highly recommends that you schedule a meeting with Bobby Dye, Regional Air Quality and Remediation Manager, at (208) 736-2190 to review and discuss the terms and conditions of this permit. Should you choose to schedule this meeting, DEQ recommends that the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any other staff responsible for day-to-day compliance with permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to contact Dan Pitman at (208) 373-0502 or daniel.pitman@deq.idaho.gov to address any questions or concerns you may have with the enclosed permit.

Sincerely,

Mike Simon
Stationary Source Program Manager
Air Quality Division

MS\DP
Permit No. P-2009.0124 PROJ 62108
Enclosures

Air Quality

PERMIT TO CONSTRUCT

Permittee	Pacific Ethanol Magic Valley LLC
Permit Number	P-2009.0124
Project ID	62108
Facility ID	031-00032
Facility Location	2600 Washington Avenue Burley, Idaho 83318

Permit Authority

This permit (a) is issued according to the "Rules for the Control of Air Pollution in Idaho" (Rules), IDAPA 58.01.01.200–228; (b) pertains only to emissions of air contaminants regulated by the State of Idaho and to the sources specifically allowed to be constructed or modified by this permit; (c) has been granted on the basis of design information presented with the application; (d) does not affect the title of the premises upon which the equipment is to be located; (e) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (f) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; and (g) in no manner implies or suggests that the Idaho Department of Environmental Quality (DEQ) or its officers, agents, or employees assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment. Changes in design, equipment, or operations may be considered a modification subject to DEQ review in accordance with IDAPA 58.01.01.200–228.

Date Issued November 29, 2018

Dan Pitman

Dan Pitman, P.E., Permit Writer

Mike Simon

Mike Simon, Stationary Source Manager

Contents

1 Permit Scope

Purpose

1.1 This is a revised permit to construct (PTC) to allow noncontact cooling tower blowdown water to be used in a scrubber and to change the regenerative thermal oxidizer (RTO) temperature monitoring location to the combustion chamber.

1.2 Those permit conditions that have been modified or revised by this permitting action are identified by the permit issue date citation located directly under the permit condition and on the right-hand margin.

1.3 This PTC replaces Permit to Construct No. P-2009.0124, issued on September 25, 2014.

Regulated Sources

Table 1.1 lists all sources of regulated emissions in this permit.

Table 1.1 Regulated Sources

Emission Unit	Size or Capacity	Control Equipment
Truck Dump Pit - Corn	25,000 Bushels/hr	Corn Receiving Baghouse
Rail Dump Pit - Corn	50,000 Bushels/hr	
Corn Load-out	7,500 Bushels/hr	
3- Corn Conveyors	5,000 Bushels/hr	Corn Handling Baghouse
2- Corn Elevators	5,000 Bushels/hr	
Scalper	5,000 Bushels/hr	
2- Corn Bins	471,927 Bushels each	Corn Handling Baghouse or Corn Receiving Baghouse
Corn Surge Bin	5,414 Bushels	Corn Handling Baghouse
2- Hammermills	1,124 Bushels/hr each	Hammermill Baghouse
4- Fermenters	705,576 Gallons each	Fermentation Scrubber & RTO
Beerwell	910,944 Gallons	
Liquefaction Tank	165,438 Gallons	Vent Gas Scrubber & RTO
Slurry Tank	17,004 Gallons	
Beer Stripper	26,738 Gallons	
Side Stripper	6,500 Gallons	
Regen Receiver Tank	11,000 Gallons	
Reflux Vent Condenser	1,100 Gallons/hr (approximate)	
Whole Stillage Tank	178,459 Gallons	
Process Condensate Tank	178,459 Gallons	
Evaporator Vacuum Receiver Tank	2,500 Gallons	
5-Centrifuges	13,200 Gallons/hr each	
Syrup Tank	122,251 Gallons	
Thin Stillage Tank	115,007 Gallons	
Yeast Propagation Tank	26,738 Gallons	
Ethanol Truck Load-out	38,000 Gallons/hr	Flare or RTO
Ethanol Rail Load-out	60,000 Gallons/hr	
Rectifier Column	26,173 Gallons	RTO
3-Boilers	75.6 MMBtu/hr, Natural Gas	None
190-Proof Tank	185,068 Gallons	Internal Floating Roof
Denaturant Tank	63,452 Gallons	Internal Floating Roof
2- 200 Proof Tanks	185,068 Gallons each	
2- Denatured Ethanol Tanks	619,573 Gallons each	
Cooling Towers		None
Ammonia Tank	33,886 Gallons	None
Sulfuric Acid Tank	10,557 Gallons	None
Fire Pump Engine	Diesel Fuel 288BHP	None

[11/29/18]

2 Corn Receiving, Milling, Shipping, Load-out and Storage

2.1 Process Description

Ground and/or whole corn is shipped from the facility. Load-out equipment emissions are controlled by baghouses. The grain receiving operations consist of unloading of corn by trucks or railcars into dump pits which are aspirated to baghouse control. Corn is then transferred via enclosed conveying equipment to two storage bins. Corn is received at the plant in hopper bottom trucks or railcars at two dump pits (one each for trucks and railcar) that are located inside enclosed buildings. The dump pits are fitted with conveyor belts, which feed the elevator leg and grain-to-grain storage bins. The dump pits and associated corn transfer points are controlled by the corn receiving and handling baghouses.

2.2 Control Device Descriptions

Table 2.1 lists the emissions units and associated control devices associated with the section of the permit.

Table 2.1 CORN RECEIVING, MILLING AND STORAGE DESCRIPTION.

Emissions Unit(s) / Process(es)	Emissions Control Device
Truck Dump Pit	Corn Receiving Baghouse, Manufacturer guarantee PM emissions of 0.005 gr/dscf or less
Rail Dump Pit	
Corn Load-out	
Corn Conveyors (3)	Corn Handling Baghouse, Manufacturer guarantee PM emissions of 0.005 gr/dscf or less
Corn Elevators (2)	
Scalper	
Corn Bins (2)	Corn Handling Baghouse or Corn Receiving Baghouse, either baghouse Manufacturer guarantee PM emissions of 0.005 gr/dscf or less
Corn Surge Bin	Corn Handling Baghouse, Manufacturer guarantee PM emissions of 0.005 gr/dscf or less
Hammermills (2)	Hammer Mill Baghouse, Manufacturer guarantee emissions of 0.005 gr/dscf or less

[11/29/18]

Emission Limits

2.3 Opacity Limit

Emissions from any other stack, vent, or functionally equivalent opening shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

2.4 Fugitives Emissions

All reasonable precautions shall be taken to prevent fugitive PM from becoming airborne in accordance with IDAPA 58.01.01.650-651.

Operating Requirements

2.5 Throughput Limits

The permittee shall limit throughput from grain receiving and load-out to 13,680 tons per day.

2.6 Grain Receiving Limits

The permittee shall limit total grain received to 944,213 tons over any consecutive 12-month period.

2.7 Baghouse PM Manufacturer Warranties

The permittee shall maintain on-site, and make available to DEQ representatives upon request, manufacturer guarantees stating that the corn receiving baghouse, corn handling baghouse and hammermill baghouses will emit no more PM than 0.005 grains per dry standard cubic foot.

2.8 Operations and Maintenance Manual

The permittee shall have developed an Operations and Maintenance (O&M) manual for the corn receiving baghouse, corn handling baghouse which control the PM and PM_{10} emissions from the grain handling, milling and storage operations. The O&M manual shall describe the procedures that will be followed to comply with General Provision 10.2 and the manufacturer guarantee specifications for the baghouses. The manual shall contain, at a minimum, requirements for quarterly inspections of the baghouses. The inspections shall include, but not be limited to, checking the bags or cartridges for structural integrity and to determine whether they are appropriately secured in place. The manual shall remain on-site at all times and shall be made available to DEQ representatives upon request.

The permittee shall operate the baghouses in accordance with the O&M manual.

Monitoring and Recordkeeping Requirements

2.9 Baghouse Inspections

Records of the results of the quarterly baghouse inspections shall be maintained on site for a period of five years and be made available to DEQ representatives upon request. The records shall include, at a minimum, the date of each inspection, description of the structural integrity of the bags/filters, and a description of any maintenance or corrective action performed.

2.10 Reasonable Control Measures

The permittee shall conduct a quarterly facility-wide inspection of potential sources of fugitive emissions during daylight hours and under normal operating conditions to ensure that the methods used to reasonably control fugitive emissions are effective. If fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each quarterly fugitive emissions inspection. The records shall include, at a minimum, the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive emissions were present (if observed), any corrective action taken in response to the fugitive emissions, and the date the corrective action was taken.

2.11 Visible Emissions Monitoring

The permittee shall conduct a quarterly facility-wide inspection of the ethanol plant for visible emissions during daylight hours and under normal operating conditions. The visible emissions inspection shall consist of a see/no see evaluation. If any visible emissions are present from any point of emission, the permittee shall take appropriate corrective action as expeditiously as practicable. If the corrective action does not eliminate the visible emissions, then a Method 9 visible emissions observation must be conducted as soon as possible, but in no case later than 48 hours after the failure of the corrective action to remedy the visible emissions. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20%

for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedence in accordance with IDAPA 58.01.01.130-136. The permittee shall maintain records of the results of each visible emission inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and test, and a description of the following: the permittee's assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken.

Records of this information shall be kept on-site for the most recent five-year period and shall be made available to DEQ representatives upon request.

3 Fermentation, Distillation & Ethanol Load-out

3.1 Process Description

The fermentation and distillation operations consist of a slurry tank, yeast tank, liquefaction tank, beerwell, de-gas vessel, three-column distillation unit, molecular sieve, 200 proof condenser, whole stillage tank, process condensate tank, thin stillage tank, syrup tank, evaporators, five centrifuges, and four fermenters.

3.2 Control Device Descriptions

Table 3.1 lists the emissions units and associated control devices associated with the section of the permit.

Table 3.1 FERMENTATION AND DISTILLATION EQUIPMENT

Emissions Unit(s) / Process(es)	Emissions Control Device
4- Fermenters	Fermentation Scrubber[1] & RTO
Beerwell	
Liquefaction Tank	Vent Gas Scrubber[1] & RTO
Slurry Tank	
Beer Column	
Regen Receiver Tank	
Reflux Vent Condenser	
Whole Stillage Tank	
Process Condensate Tank	
Evaporator Vacuum Receiver Tank	
5-Centrifuges	
Syrup Tank	
Thin Stillage Tank	
Yeast PropgationTank	
Stripper Column	RTO
Rectifier Column	
Ethanol Truck Loadout	Flare or RTO
Ethanol Rail Loadout	

1) Delta-T Corporation Design

[11/29/18]

Emission Limits

3.3 Regenerative Thermal Oxidizer (RTO) Emission Limits

The formaldehyde, acetaldehyde and VOC emissions from the RTO stack shall not exceed any corresponding emissions rate limits listed in Table 3.2.

Table 3.2 RTO EMISSIONS LIMITS

Source Description	Formaldehyde	VOC		Acetaldehyde
	lb/hr[1]	lb/hr[1]	T/yr[2]	lb/hr[1]
RTO Stack	0.76	5.94	26.0	2.01

1) As determined by an applicable source test method conducted in accordance with IDAPA 58.01.01.157.
2) As determined by operating in compliance with the lb/hr emission rates and with the denatured ethanol production limits.

3.4 Odors

The permittee shall not allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution in accordance with IDAPA 58.01.01.775-776.

Operating Requirements

3.5 Ethanol Production Limits

The permittee shall not produce more than 70 million gallons of undenatured ethanol and 73.57 million gallons of denatured ethanol per any consecutive 12-month period.

[9/25/14]

3.6 Process Gas Capture Requirements

Emissions from the following equipment shall be vented to the Fermentation Scrubber and then the RTO, neither the Fermentation Scrubber nor RTO treatment device shall be bypassed:

- Fermenters (4)
- Beerwell

Emissions from the following equipment shall be vented and treated in the Vent Gas Scrubber and the RTO, neither the Vent Gas Scrubber nor RTO treatment device shall be bypassed:

- Liquefaction Tank
- Slurry Tank
- Beer Column
- Regen Receiver Tank
- Reflux Vent Condenser
- Whole Stillage Tank
- Process Condensate Tank
- Evaporator Vacuum Receiver Tank
- Centrifuge (5)
- Syrup Tank
- Thin Stillage Tank
- Yeast Tank

Emissions from the following equipment shall be vented and treated in the RTO:

- Stripper Column
- Rectifier Column

[11/29/18]

3.7 Ethanol Load-Out Requirements

Denatured ethanol loadout to either railcar or truck shall be performed by submerged loading. All vapors displaced during either railcar or truck loading shall be vented to the flare or RTO.

[3/21/12]

3.8 Fermentation and Vent Gas Scrubber Requirements

The Fermentation and Vent Gas Scrubber shall:

- Use fresh water and/or noncontact cooling tower blowdown water as a scrubbing liquid
- Discharge scrubbing liquid to the slurry tank or process condensate tank
- Be equipped with scrubbing water flow-rate monitors

Fresh water and/or noncontact cooling tower blowdown water flow-rate to the Fermentation Scrubber and Vent Gas Scrubber shall not be less than the average gallon per minute flow rate measured during the most recent source test that demonstrated compliance.

[11/29/18]

3.9 RTO Requirements

The rolling 3-hour average temperature of the RTO combustion chamber shall not be less than 50 degrees Fahrenheit of the average temperature measured during the most recent compliance test.

[11/29/18]

3.10 Flare

If vapors displaced during ethanol loadout are combusted in a flare the permittee shall install, maintain, and operate flame detector on the flare. A flame shall be detected to be present prior to and during either railcar or truck loading.

Monitoring and Recordkeeping Requirements

3.11 Operating Parameters

The following parameters shall be monitored and recorded. The records shall be maintained on-site for a period of five years and be made available to DEQ representatives upon request.

- The gallons of undenatured and denatured ethanol produced in any consecutive 12-month period. Each month the permittee shall record the amounts for that month and for the most recent consecutive 12-month period.
- Water flow-rate to the Fermentation Scrubber and Vent Gas Scrubber shall be monitored and recorded in gallons per minute once each day.
- The permittee shall monitor and record the 3-hour rolling average temperature of the RTO combustion chamber. Temperatures shall be monitored and recorded at a minimum of once each 15 minutes. The 3-hour rolling average temperature is determined once every 60 minutes by averaging all the temperatures monitored and recorded during the past 180 minutes.

[11/29/18]

3.12 Flare Monitoring

For each truck or railcar loading event, if a flare is used to control emissions the permittee shall monitor and record:

- The date and time.
- Flare flame sensor reading (flame detected or not).

Performance Testing Requirements

3.13 Performance Test

The permittee shall conduct performance tests each five years after the initial performance test to demonstrate compliance with the pound per hour formaldehyde, acetaldehyde and VOC emission rate limits.

The scrubbing media flow rate to the scrubbers shall be monitored and recorded in gallons per minute during each consecutive 15-minute period of the source test.

The combustion chamber temperature of the RTO shall be monitored and recorded a minimum of once every 15 minutes during the test.

[11/29/18]

3.14 Odors

The permittee shall maintain records of all odor complaints received. If the complaint has merit, the permittee shall take appropriate corrective action as expeditiously as practicable. The records shall include, at a minimum, the date each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

4 Boilers

4.1 Process Description

Steam will be produced in three 75.6 MMBtu/hr natural gas fired boilers. Emissions are uncontrolled.

Emission Limits

4.2 NSPS 40 CFR 60, Subpart Dc – Standards for Particulate Matter

On or after the date on which the initial performance test is required to be complete under 40 CFR 60.8 for steam generating units constructed or modified on or after February 28, 2005, particulate matter emissions shall not be in excess of 0.030 lb/MMBtu heat input in accordance with 40 CFR 60.43c(e)(1). Should there be a conflict between 40 CFR 60.43c and this permit condition, 40 CFR 60.43c shall govern.

Operating Requirements

4.3 Fuel Type Restriction

The boilers shall be fired on natural gas exclusively.

4.4 NSPS Applicability Determination

In order to determine applicability of 40 CFR 60.43c the permittee shall maintain records on-site of the date of construction (i.e. fabrication) or modification of the boilers and their maximum rated input capacity.

Monitoring and Recordkeeping Requirements

4.5 NSPS 40 CFR 60, Subpart Dc - Compliance and Performance Test Methods

In accordance with 40 CFR 60.45c(a), the operator of an affected facility shall:

- Conduct an initial performance test as required under 40 CFR 60.8 to demonstrate compliance with the particulate matter standards of 40 CFR 60.43c, or
- As an alternative shall only combust gaseous fuels with potential sulfur dioxide emission rates of 0.54 lb/MMBtu heat input are not required to conduct a performance test provided fuel supplier certification of the sulfur content of fuels burned is maintained.

Should there be a conflict between 40 CFR 60.43c and this permit condition, 40 CFR 60.43c shall govern.

5 Storage Tanks (Denaturant, Ethanol & Denatured Ethanol)

5.1 Process Description

190 proof ethanol will be stored in one tank prior to entering the molecular sieves. Denaturant used to blend with the ethanol product will be stored in one tank. Two anhydrous (200-proof) ethanol tanks will be used to store finished ethanol prior to blending with denaturant and shipment. Denatured ethanol will be stored in two tanks. Emissions from the tanks are controlled by internal floating roofs.

Table 5.1 lists the emissions units and associated control devices associated with the section of the permit.

Table 5. 1 STORAGE TANKS

Emissions Unit	Emissions Control Device
190-Proof Tank (174,500 Gallons)	Internal Floating Roof
Denaturant Tank (58,750 Gallons)	
2- 200 Proof Tanks (each 174,500 Gallons)	
2- Denatured Ethanol Tanks (each 587,000 Gallons)	

Operating Requirements

5.2 NSPS 40 CFR 60, Subpart Kb - Standard for Volatile Organic Compounds (VOC)

The owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m^3 containing a volatile organic liquid that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa but less than 76.6 kPa shall equip the storage vessel with one of the emission control strategies specified 40 CFR 60.112b(a) (i.e. install a fixed roof tank with and internal floating roof). For fixed roof tanks in combination with an internal floating roof the following requirements shall apply in accordance with 40 CFR 60.112b(a)(1):

- The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
- Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

(A) A foam or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

(B) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the

internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.

(C) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

- Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

- Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

- Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

- Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

- Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

- Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

- Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

Should there be a conflict between this permit and 40 CFR 60.112b, 40 CFR 60.112b shall govern.

Monitoring and Recordkeeping Requirements

5.3 NSPS 40 CFR 60, Subpart Kb - Testing and Procedures

After installing the control equipment required to meet 40 CFR 60.112b(a)(1) (permanently affixed roof and internal floating roof), each owner or operator shall:

5.3.1 Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.

5.3.2 For Vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Department in the inspection report required in 40 CFR 60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

5.3.3 For vessels equipped with a double-seal system as specified in §60.112b(a)(1)(ii)(B):

(i) Visually inspect the vessel as specified in paragraph (a)(4) of 40 CFR 60.113b at least every 5 years; or

(ii) Visually inspect the vessel as specified in paragraph (a)(2) of 40 CFR 60.113b.

[11/29/18]

5.3.4 Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection at intervals no greater than 5 years in the case of vessels equipped with a double seal system.

[11/29/18]

5.3.5 Notify the Department in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required to afford the Department the opportunity to have an observer present. If the inspection required is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the Department at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Department at least 7 days prior to the refilling.

[11/29/18]

5.4 NSPS 40 CFR 60, Subpart Kb - Reporting and Recordkeeping Requirements

After installing control equipment in accordance with 40 CFR 60.112b(a)(1) (fixed roof and internal floating roof), the owner or operator shall meet the following requirements:

- Furnish the Department with a report that describes the control equipment and certifies that the control equipment meets the specifications of this permit. This report shall be an attachment to the notification of actual facility startup required by 40 CFR 60.7(a)(3).

- Keep a record of each inspection performed as required by this permit. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
- If any of the conditions described in Permit Condition 5.3.2 are detected during the annual visual inspection required by Permit Condition 5.3.2, a report shall be furnished to the Department within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.
- After each inspection that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects, a report shall be furnished to the Department within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of this permit and list each repair made.

[11/29/18]

5.5 NSPS 40 CFR 60, Subpart Kb - Monitoring of Operations

The permittee shall monitor affected facility operations in accordance with 40 CFR 60.116b as summarized by this permit. The Permittee shall keep records on-site for a period of five years (in accordance with Permit to Construct General Provisions) and the records shall be readily available to Department representatives upon request, except records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel shall be kept for the life of the source in accordance with 40 CFR 60.116b(a).

- The owner or operator of each volatile organic storage vessel with a storage volume greater than 75 m^3 shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
- The owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure greater than or equal to 3.5 kPa or with a design capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure greater than or equal to 15.0 kPa shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.
- The owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa or with a design capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa shall notify the Department within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.
- The true vapor pressure of the volatile organic liquid shall be determined in accordance with 40 CFR 60.116b(e).

6 Facility-wide Natural Gas Usage

6.1 Process Description

Natural gas is combusted in three 75.6 MMBtu/hr boilers, RTO and flare.

Operating Requirements

6.2 Facility-wide Throughput Limits

Facility-wide natural gas combustion shall not exceed 1,667 million cubic feet per any consecutive 12- month period.

6.3 The permittee shall have developed and submitted to DEQ an Operations and Maintenance (O&M) manual for the natural gas fired boilers, the RTO and the flare which describes the procedures that will be followed to assure good combustion occurs. The procedures shall include the manufacturer specifications for the combustors and requirements to assure that they are maintained in good working order and are operated as efficiently as practicable as required by the General Provisions of this permit. The manual shall be a permittee developed document independent of the manufacturer supplied operating manuals but may include summaries of procedures included in the manufacturer supplied operating manuals. At a minimum the following items shall be included in the manual that is required to be developed by the permittee:

- Procedures for annual inspections to determine if good combustion is occurring in the boilers, the RTO and the flare.
- Procedures for correcting conditions that contribute to poor combustion.

A copy of the manufacturer's recommendations shall be included with the O & M manual and both shall be made available to DEQ representatives upon request.

The O&M manual shall be certified by a responsible official. Any changes to the O&M Manual shall be submitted within 15 days of the change.

The operation and monitoring requirements specified in the O&M manual are incorporated by reference to this permit and are enforceable permit condition.

[11/29/18]

Monitoring and Recordkeeping Requirements

6.4 The permittee shall monitor and record the cubic feet of natural gas combusted at the facility each calendar month and each consecutive 12-calendar month period.

6.5 The permittee shall conduct an annual inspection of the boilers, RTO and flare according to the procedures developed by the permittee in the O&M manual that is required to be developed by this permit.

The permittee shall:

- record whether good combustion is occurring;
- record any conditions that were corrected; and
- follow the monitoring and recordkeeping requirements specified by the General Provisions of this permit.

7 Fire Pump Engine

7.1 Process Description

A 288 brake horsepower diesel fire pump engine is installed for firefighting capability in case of emergency.

[11/29/18]

Emission Limits

7.2 In accordance with 40 CFR 60.4205(c) emissions from the fire pump engine shall comply with the emission limits included in Table 7.1.

Table 7.1 FIRE PUMP ENGINE EMISSIONS LIMITS 40 CFR 60.4205(c)[1]

Source Description	NMHC[2] + NOx	CO	PM
	g/HPhr[3]	g/HPhr[3]	g/HPhr[3]
Pump Engine	7.8	2.6	0.40

1) In absence of any other credible evidence, compliance is assured by complying with this permit's operating, monitoring and record keeping requirements.
2) Non-methane hydrocarbons.
3) Grams per horse-power hour.

Operating Requirements

7.3 In accordance with 40 CFR 60.4207(b) the fire pump engine shall use diesel fuel that meets the requirements of 40 CFR 80.510(b).

In accordance with 40 CFR 80.510(b) diesel fuel is subject to the following standards:

- Sulfur content 15 ppm maximum
- Cetane index of 40 or a maximum aromatic content of 35 volume percent.

7.4 In accordance with 40 CFR 60.4209 the fire pump engine shall be equipped with a non-resettable hour meter prior to startup of the engine.

7.5 In accordance with 40 CFR 60.4211(a) Pacific Ethanol shall:

- Operate and maintain the stationary internal combustion engine and control device according to the manufacturer's emission-related written instructions;
- Change only those emission-related settings that are permitted by the manufacturer; and
- Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply.

[11/29/18]

7.6 In accordance with 40 CFR 60.4211(b) the engine must be installed and configured according to the manufacturer's specifications.

7.7 In accordance with 40 CFR 60.4211(f) the internal combustion engine (ICE) may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. 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 ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.

7.8 The fire pump engine shall:

- Operate only between the hours of 10 am and 2 pm during maintenance checks and readiness testing; and
- Operate no more than a 30 minutes per hour during the period of September through May.

Monitoring and Recordkeeping Requirements

7.9 The permittee shall monitor and record the date, time and duration of the operation of the fire pump engine during maintenance checks and readiness testing.

Incorporation of Federal Requirements by Reference

7.10 Unless expressly provided otherwise, any reference in this permit to any document identified in IDAPA 58.01.01.107.03 shall constitute the full incorporation into this permit of that document for the purposes of the reference, including any notes and appendices therein. Documents include, but are not limited to:

- Standards of Performance for New Stationary Sources (NSPS), 40 CFR Part 60

For permit conditions referencing or cited in accordance with any document incorporated by reference (including permit conditions identified as NSPS or NESHAP), should there be any conflict between the requirements of the permit condition and the requirements of the document, the requirements of the document shall govern, including any amendments to that regulation.

8 Pumps, Compressors, Values, Flanges, etc.

8.1 Process Description

All equipment (pumps, compressors, valves and flanges, etc.) that are assembled to produce ethanol are subject to Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry (40 CFR 60.480).

Operating Requirements

8.2 NSPS 40 CFR 60, Subpart Vv – Operating Standards

The permittee shall demonstrate compliance with the requirements of 40 CFR 60.482-1 through 60.482-10 within 180 days of initial startup of the affected facility. These requirements include, but are not limited to sampling, leak detection, repair and equipment specifications (seals, sensors, vapor recovery, etc.).

Monitoring and Recordkeeping Requirements

8.3 NSPS 40 CFR 60, Subpart Vv – Test Methods and Procedures

The permittee shall comply with the Test Methods and Procedures specified by 40 CFR 60.485. Method 21 shall be used when determining leaks and background levels. These requirements include but are not limited to specifying compliance test methods and procedures for leak detection.

8.4 NSPS 40 CFR 60, Subpart Vv – Recordkeeping Requirements

The permittee shall comply with the Recordkeeping Requirements specified by 40 CFR 60.486. The requirements include but are not limited to collecting information in a log regarding repairs, dates of startup and shutdown, a listing of equipment that is subject to 40 CFR 60.480, design specifications, dates of compliance tests, etc.

Reporting Requirements

8.5 NSPS 40 CFR 60, Subpart Vv – Reporting Requirements

The permittee shall comply with the Reporting Requirements specified by 40 CFR 60.487. Reports are required semiannually.

The initial semiannual report shall include, but not be limited to, the following:

- Process unit identification (Process unit is defined 40 CFR 60.481)
- The number of valves subject to 40 CFR 60.482-7
- The number of pumps subject to 40 CFR 60.482-2
- The number of compressors subject to 40 CFR 60.482-3

All semiannual reports shall include, but not be limited to, the following:

- Process unit identification (Process unit is defined 40 CFR 60.481)
- For each month during the semiannual reporting period report the number of valves, pumps and compressors that leaked and the number for which leaks were not repaired
- Dates of process unit shutdowns

- Revisions to process units identified in the initial semiannual report
- Report the results of all performance tests

Should there be a conflict between this permit and 40 CFR 60.480, 40 CFR 60.480 shall govern.

9 NSPS General Provisions

9.1 NSPS 40 CFR 60, General Provisions

The permittee shall comply with the requirements of 40 CFR 60, Subpart A – General Provisions. A summary of applicable requirements for affected facilities is provided in Table 9.1.

Table 9.1 NSPS 40 CFR 60, Subpart A – Summary of General Provisions for Owners and Operators of Affected Facilities

Section	Subject	Summary of Section Requirements
60.4	Address	• All requests, reports, applications, submittals, and other communications associated with 40 CFR 60, Subpart(s) Dc, Kb and Vv shall be submitted to: Twin Falls Regional Office Department of Environmental Quality 1363 Fillmore St Twin Falls, Idaho 83301
60.7(a),(b), and (f)	Notification and Recordkeeping	• Notification shall be furnished of commencement of construction postmarked no later than 30 days of such date. • Notification shall be furnished of initial startup postmarked within 15 days of such date. • Notification shall be furnished of any physical or operational change that may increase emissions postmarked 60 days before the change is made. • Records shall be maintained of the occurrence and duration of any startup, shutdown or malfunction; any malfunction of the air pollution control equipment; or any periods during which a CMS or monitoring device is inoperative. • Records shall be maintained, in a permanent form suitable for inspection, of all measurements, performance testing measurements, calibration checks, adjustments and maintenance performed, and other required information. Records shall be maintained for a period of two years following the date of such measurements, maintenance, reports, and records.
60.8	Performance Tests	• At least 30 days prior notice of any performance test shall be provided to afford the opportunity to have an observer to be present. • Within 60 days of achieving the maximum production rate, but not later 180 days after initial startup, performance test(s) shall be conducted and a written report of the results of such test(s) furnished. • Performance testing facilities shall be provided as follows: Sampling ports adequate for test methods applicable to such facility. Safe sampling platform(s). Safe access to sampling platform(s). Utilities for sampling and testing equipment. • Performance tests shall be conducted and data reduced in accordance with 40 CFR 60.8(b), (c), and (f).
60.11(a), (d), (f), and (g)	Compliance with Standards and Maintenance Requirements	• When performance tests are required, compliance with standards is determined by methods and procedures established by 40 CFR 60.8. • At all times, including periods of startup, shutdown, and malfunction, the owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. • For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.
60.11(b), (c), and (e)	Compliance with Standards and Maintenance Requirements (Opacity)	• Compliance with opacity standards shall be determined by Method 9 in Appendix A of 40 CFR 60. The permittee may elect to use COM measurements in lieu of Method 9, provided notification is made at least 30 days before the performance test. • The opacity standards shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided. • Opacity observations shall be conducted concurrently with the initial performance test required in 40 CFR 60.8 in accordance with the requirements and exceptions in 40 CFR 60.11(e).

60.12	Circumvention	• No permittee shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard.
60.14	Modification	• A physical or operational change which results in an increase in the emission rate to the atmosphere or any pollutant to which a standard applies shall be considered a modification, and upon modification an existing facility shall become an affected facility in accordance with the requirements and exemptions in 40 CFR 60.14. • Within 180 days of the completion of any physical or operational change, compliance with all applicable standards must be achieved.
60.15	Reconstruction	• An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate in accordance with the requirements of 40 CFR 60.15.

10 General Provisions

General Compliance

10.1 The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the "Rules for the Control of Air Pollution in Idaho." The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit, the "Rules for the Control of Air Pollution in Idaho," and the Environmental Protection and Health Act (Idaho Code §39-101, et seq.)

[Idaho Code §39-101, et seq.]

10.2 The permittee shall at all times (except as provided in the "Rules for the Control of Air Pollution in Idaho") maintain in good working order and operate as efficiently as practicable all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.

[IDAPA 58.01.01.211, 5/1/94]

10.3 Nothing in this permit is intended to relieve or exempt the permittee from the responsibility to comply with all applicable local, state, or federal statutes, rules, and regulations.

[IDAPA 58.01.01.212.01, 5/1/94]

Inspection and Entry

10.4 Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:

- Enter upon the permittee's premises where an emissions source is located, emissions-related activity is conducted, or where records are kept under conditions of this permit;
- Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
- Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
- As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.

[Idaho Code §39-108]

Construction and Operation Notification

10.5 This permit shall expire if construction has not begun within two years of its issue date, or if construction is suspended for one year.

[IDAPA 58.01.01.211.02, 5/1/94]

10.6 The permittee shall furnish DEQ written notifications as follows:

- A notification of the date of initiation of construction, within five working days after occurrence; except in the case where pre-permit construction approval has been granted then notification shall be made within five working days after occurrence or within five working days after permit issuance whichever is later;
- A notification of the date of any suspension of construction, if such suspension lasts for one year or more; and

- A notification of the initial date of achieving the maximum production rate, within five working days after occurrence - production rate and date.

[IDAPA 58.01.01.211.01, 5/1/94]

- A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date; and
- A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date.

[IDAPA 58.01.01.211.03, 5/1/94]

Performance Testing

10.7 If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

10.8 All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

10.9 Within 60 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

[IDAPA 58.01.01.157, 4/5/00 and 4/11/15]

Monitoring and Recordkeeping

10.10 The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Monitoring records shall include, but not be limited to, the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

[IDAPA 58.01.01.211, 5/1/94]

Excess Emissions

10.11 The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130–136 for excess emissions due to start-up, shut-down, scheduled maintenance, safety measures, upsets, and breakdowns.

[IDAPA 58.01.01.130–136, 4/5/00]

Certification

10.12 All documents submitted to DEQ—including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification—shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

[IDAPA 58.01.01.123, 5/1/94]

False Statements

10.13 No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.125, 3/23/98]

Tampering

10.14 No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.126, 3/23/98]

Transferability

10.15 This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06.

[IDAPA 58.01.01.209.06, 4/11/06]

Severability

10.16 The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

[IDAPA 58.01.01.211, 5/1/94]