

Statement of Basis

**Permit to Construct No. P-2010.0050
Project ID 61618**

**Pico Energy, LLC
Jerome, Idaho**

Facility ID 053-00017

Final

**December 8, 2015
Michael Miller 
Permit Writer**

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.

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FACILITY INFORMATION

Description

An anaerobic digester is used to produce biogas from on-site dairy cattle manure. The resulting biogas is passed through a bio-scrubber to decrease the concentration of H₂S in the gas stream. The biogas is then combusted in two reciprocating IC engines and/or a flare. The two reciprocating IC engines are used to power electrical generators. During emergencies and routine maintenance the IC engines are taken offline and the excess biogas is combusted in the flare without passing through bio-scrubber.

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 Permit status is noted as active and in effect (A) or superseded (S).

August 11, 2009 P-2010.0050, PTC revised for a facility name change. Superseded (S) by PTC No. P-2015.0050, Project 61618, issued December 1, 2015.

Application Scope

This PTC is a revision of an existing PTC.

The applicant has proposed to:

This permit revision changes the name of the facility from Cargill Environmental Finance/Bettencourt B-6 Dairy to Pico Energy, LLC.

This PTC replaces Permit to Construct No. P-2010.0050, Project ID 61046, issued on May 21, 2012.

Application Chronology

October 29, 2015 DEQ received an application.

December 1, 2015 DEQ issued the final permit and statement of basis.

Facility Classification

The AIRS AFS Facility Classification Form for this facility and Permit Revision has been updated.

Refer to TRIM Record Reference No. 2012AAG1337.

Permit to Construct (IDAPA 58.01.01.201)

IDAPA 58.01.01.201Permit to Construct Required

The permittee has requested that a revised PTC be issued to the facility for a name change. 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.

Permit Conditions Review

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

Existing Permit Condition 2.3

Emission Limits – Table 2.2 BIOGAS-FIRED IC ENGINE EMISSION LIMITS

Revised Permit Condition 2.3 – Footnotes for table 2.2.

- a In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and record keeping requirements.
- b Particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers, including condensable particulate as defined in IDAPA 58.01.01.006.
- c Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference test method, continuous emission monitoring system (CEMS) data, or DEQ-approved alternative.
- d Tons per any consecutive 12-calendar month period.”

This permit condition has been updated with current language in Table 2.2 with descriptions of the components within the table for proper clarification of emission limits.

Existing Permit Condition 2.19

- “Within 60 days of initial startup of the anaerobic digester, the permittee shall install, calibrate, maintain and operate biogas flow meters that shall be placed before each combustion source.”

Revised Permit Condition 2.19

- *“The permittee shall calibrate, maintain, and operate biogas flow meters that shall be place before each combustion source.”*

This permit condition has been revised to remove the reference to the time sensitive language regarding 60 days of the initial startup of the anaerobic digester, and the permittee shall install the biogas flow meters, because this installation process has already been completed.

Existing Permit Condition 2.20

- “Within 120 days of initial startup of the anaerobic digester, the permittee shall install, calibrate, maintain and operate an H₂S gas concentration monitor that shall be placed downstream of the digester and the bio-scrubber, and upstream of the IC engines and the flare, to measure the H₂S concentration of the biogas.”

Revised Permit Condition 2.20

- *“The permittee shall calibrate, maintain, and operate an H₂S gas concentration monitor that shall be placed downstream of the digester and the bio-scrubber, and upstream of the IC engines and the flare, to measure the H₂S concentration of the biogas.”*

This permit condition has been revised to remove the reference to the time sensitive language regarding 120 days of the initial startup of the anaerobic digester, and the permittee shall install the H₂S gas concentration monitor, because this installation process has already been completed.

Existing Permit Condition 2.21

- “Within 60 days of permit issuance, the permittee shall have developed and submitted to DEQ an Operations and Maintenance (O&M) manual for the anaerobic digester, the bio-scrubber, the two IC engines, and the flare which describes the procedures that will followed to comply with General Provisions 2 of this permit and the manufacturer’s specifications for each piece of equipment.”

Page 9 “Requirements to periodically monitor and record the parameters listed above no less frequently than once per calendar month.”

“All records shall be maintained on site for a period of 5 years, shall be made available to DEQ representatives upon request, and shall be maintained in accordance with General Provision 7.”

“The contents of the O & M manual shall be based on manufacturer’s specifications for each piece of equipment.

Page 10 “The O & M manual shall be submitted to DEQ within 60 days of permit issuance and shall contain a certification by a responsible official. Any changes to the O & M manual shall be submitted within 15 days of the change.”

Revised Permit Condition 2.21

- *“The permittee shall have developed and submitted to DEQ an Operations and Maintenance (O&M) manual for the anaerobic digester, the bio-scrubber, the two IC engines, and the flare which describes the procedures that will followed to comply with General Provisions 2 of this permit and the manufacturer’s specifications for each piece of equipment.”*

This permit condition has been revised to remove the reference to the time sensitive language regarding 60 days of the permit issuance to develop and submit an O & M manual, because the O & M manual was received by the Twin Falls Regional Office (TFRO) on March 22, 2010.

The two additional paragraphs on Page 9 were removed to eliminate repetitive language within the permit and are stated in the General Provisions 7 section.

This paragraph (i.e., The contents of the O & M manual) has been revised to include an added update to a more appropriate permit requirement:

“The permittee shall operate the anaerobic digester, the bio-scrubber, the IC engines, and the flare according to O & M manual specifications and recommendations.

The paragraph on Page 10 was removed because the O & M manual was submitted to DEQ on March 22, 2010.

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.