Electronic copy submitted on June 24, 2024 by Bernard Paul, B Paul Consulting, LLC 317-344-9730/bernie@bpaulconsulting.com
Submitted on behalf of IA Butler Biogas, LLC, Source Contact – Dave Mrowzinski (614-659-5000)



033-47990-00143 MAI 8093 B PAUL CONSULTING, LLC

PERMITTING | COMPLIANCE | ADVOCACY

June 24, 2024

SUBMITTED VIA ELECTRONIC MAIL TO AIRPERMITAPPS@IDEM.IN.GOV SUBMITTED VIA USPS PRIORITY MAIL

IDEM Air Permits Administration ATTN: Incoming Application 100 North Senate Avenue MC 61-53, IGCN 1003 Indianapolis, IN 46204-2251 Received State of Indiana

JUN 25 2024

Dept of Environmental Mgmt Office of Air Quality

RE:

APPLICATION FOR SIGNIFICANT PERMIT REVISION TO MSOP 033-45195-00143 – IA BUTLER BIOGAS, LLC

To whom it may concern:

Please find enclosed an original application to the Indiana Department of Environmental Management Office of Air Quality Management for a significant permit modification to Minor Source Operating Permit 033-45195-00143 issued to IA Butler Biogas, LLC for its biogas production facility at 1867 County Road 59 in Butler, Indiana. This permit was revised on July 26, 2023 with Minor Permit Revision 033-46729-00143.

This application addresses three changes being made to the plant site.

- 1. Removal of the 1.0 scfm natural gas fired pilot flame on the Digester Flare FL-01. Instead of a pilot flame, the flare will be equipped with a continuous spark system.
- 2. Replacing the biogas upgrading system tailgas flare FL-02 with a natural gas fired thermal oxidizer. Like the tailgas flare, the thermal oxidizer will be used to combust the waste tailgas from the gas upgrading process. This gas consists primarily of CO2, CO, H2S, and traces of methane. The composition of the tailgas has not changed instead IA Butler has chosen to use a thermal oxidizer to burn off the tailgas instead of a flare. The thermal oxidizer will be equipped with a 0.5 MMBtu/hr natural gas fired burner to assist in maintaining appropriate combustion temperatures.
- 3. Changing the specifications for boiler B-01 from a 1.2 MMBtu/hr natural gas/propane unit to a capacity of 3.0 MMBtu/hr and natural gas as the only fuel.

Because the unlimited Potential to Emit (PTE) of the new thermal oxidizer and the new boiler is greater than 25 tons per year for sulfur dioxide, these changes should be processed through a Significant Permit Revision. Appendix A of this application is the updated PTE calculations for all the emission units at the site.

These changes do not cause any applicable requirements cited in the permit to change, nor do the changes trigger new applicable requirements.

The only changes needed to the permit are updates to the emission unit descriptions in Condition A.2 which are described below. (The changes made to the boiler B-01 should also be made in the emission unit description box in Section D.1 of the permit.)

New text is highlighted in bold, underlined font and text which should be deleted is shown with bold, strikethrough font.

A.2 Emission Units and Pollution Control Equipment Summary

This stationary source consists of the following emission units and pollution control devices:

- (a) Two (2) anaerobic digesters, identified as DIG-01 and DIG-02, each approved for construction in 2023, each with a maximum capacity of 1,037,664 gallons, and each using no controls.
- (b) One (1) digester gas flare, identified as FL-01, approved in 2022 for construction, with a maximum capacity of 110 scfm raw biogas, using no control, equipped with a natural gas-fired pilot flame with a maximum capacity of 1.0 scfm, and exhausting outdoors.
- (c) One (1) biogas upgrading system tailgas thermal oxidizer, identified as TO-01, approved in 2024 for construction, flare, identified as FL-02, approved in 2022 for construction, with a maximum capacity of 40 scfm tailgas, using no control, equipped with a natural gas-fired burnerpilot flame with a maximum capacity of 0.5 MMBtu/hr1.0 scfm, and exhausting outdoors.
- One (1) natural gas-fired or propane-fired boiler, identified as B-01, approved in **20242022** for construction, with a maximum heat input capacity of **3.01.2** MMBtu per hour, using no control, and exhausting to the stack B-01.
- (e) Unpaved roads and parking lots with public access.

No other changes are needed to the MSOP. No NSPS or NESHAP rules are triggered by these changes and the changes do not impact any IDEM rules.

This submittal also includes three IDEM permit application forms: the Application Cover Sheet, GSD-01 and GSD-15.

IDEM Air Permits Administration June 26, 2024 Page 3

If you need any additional information, please contact me at (317) 344-9730 or by email at bernie@bpaulconsulting.com.

Sincerely,

Bernard Paul

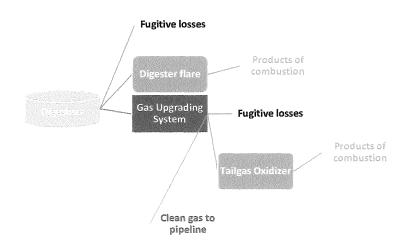
President, B Paul Consulting, LLC

Appendix A: Attachment A-1
IA Butler Biogas, LLC
Application for Significant Permit Modification
Site Summary

| Unlimited PTE | | | | | | | | | | | |
|-----------------------------|------|------|-------|------|-------|-------|------|-------|--------|--------------|------------|
| | со | NOx | PM | PM10 | PM2.5 | SO2 | VOC | H2S | Sir | ngle HAP | Total HAPs |
| Biogas fugitives | | | | | | | | 0.31 | | | |
| Digester flare (FL-01) | 0.04 | 0.04 | 0.01 | 0.01 | 0.01 | 1.62 | 0.14 | | 0.0014 | Ethylbenzene | 0.0025 |
| Gas upgrading system | | | | | | | | | | | |
| Without thermal oxidizer | | | | | | | | 15.04 | | | |
| With thermal oxidizer TO-01 | 0.23 | 0.27 | 0.00 | 0.02 | 0.02 | 28.28 | 0.01 | | 0.0050 | Hexane | 0.0050 |
| Higher scenario | 0.23 | 0.27 | 0.00 | 0.02 | 0.02 | 28.28 | 0.01 | 15.04 | 0.0050 | Hexane | 0.0050 |
| Boiler B-01 | 1.08 | 1.29 | 0.020 | 0.10 | 0.10 | 0.01 | 0.07 | | 0.0232 | Hexane | 0.0233 |
| Unpaved surfaces | | | 0.16 | 0.04 | 0.00 | | | | | | |
| Total Unlimited PTE | 1.35 | 1.60 | 0.19 | 0.17 | 0.13 | 29.91 | 0.22 | 15.35 | 0.0282 | Hexane | 0.0308 |



Appendix A: Attachment A-2 IA Butler Biogas, LLC Application for Significant Permit Modification Biogas Production and Flow



Methodology and Assumptions

Raw biogas yield based on average capacity with +20% adjustment

Raw gas components cfm, mmcf/yr, & ton/yr

cfm = Biogas yield cfm * component % by volume

mmcf = Component cfm * 60 min/hr * 8760 hr/yr * mmcf/1,000,000 cf

ton/yr = Biogas yield cfm * component ppmv/1,000,000 * MW * lb/385.1 ft3 * 60 min/hr * 8760 hr/yr * ton/2000 lb

Biogas MMBtu/yr = Biogas mmcf/yr * 600 MMBtu/mmcf

Fugitive losses = 2% of biogas yield

Digester flare does not utilize a pilot flame
Digester flare burns raw biogas in emergency mode < 500 hours per year
H2S sent to gas upgrading system = H2S sent to tailgas oxidizer
Products of combustion emissions are shown on Flares worksheet

| Raw biogas characteristics | Raw Blogas | CH4 | H2S |
|-------------------------------|------------|---------|----------|
| % by volume | 100% | 60.00% | 0.60% |
| ppmv | 1,000,000 | 600,000 | 6,000 |
| Molecular weight | | 16.04 | 34.08 |
| Higher heating value (Btu/cf) | 600 | | |
| Tail gas characteristics | Tailgas | CH4 | H2S |
| % by volume | 100% | 6.00% | ~ 1.4% |
| ppmv | 1,000,000 | 60,000 | ~ 14,000 |
| Molecular weight | | 16.04 | 34.08 |
| Higher heating value (Btu/cf) | 60 | | |

Biogas Flow

| law biogas yield | Raw biogas | CH4 | H25 |
|--------------------------------|--------------|--------|-------|
| cfm | 110 | 66.00 | 0.66 |
| mmcf/yr | 57.82 | 34.69 | 0.35 |
| ton/yr | | 722.44 | 15.35 |
| MMBtu/yr | 34,692 | | |
| Lemma ossas (29) | Affiliations | © (=14 | 1.0.0 |
| cfm | 2.20 | 1.32 | 0.01 |
| mmcf/yr | 1.16 | 0.69 | 0.01 |
| ton/yr | | 14.45 | 0.31 |
| ent to emergency flare | | | |
| 00 hours/year) | Raw biogas | CH4 | H25 |
| cfm | 107.80 | 64.68 | 0.65 |
| mmcf/yr | 3.23 | 1.94 | 0.02 |
| ton/yr | | 40.41 | 0.86 |
| MMBtu/yr | 1,940.40 | | |
| Sent to gas upgrading system | Raw biogas | CH4 | H2S |
| cfm | 107.80 | 64.68 | 0.65 |
| mmcf/yr | 56.70 | 34.00 | 0.30 |
| ton/yr | | 707.99 | 15.04 |
| MMBtu/yr | 34,020.00 | | |
| ilgas sent to thermal oxidizer | Tailgas | @ H. | H25 |
| cfm | 40.00 | 2.40 | |
| mmcf/yr | 21.00 | 1.30 | |
| ton/yr | | | 15.04 |
| MMBtu/yr | 1,260.00 | | |



Appendix A: Attachment A-3 IA Butler Biogas, LLC

Application for Significant Permit Modification

Digester Flare

| Parameter | Units | Digester flare FL-01 in emergency mode |
|-------------------------------|------------|---|
| Raw biogas flow rate to flare | scfm | 107.80 |
| Methane flow rate to flare | scfm | 64.68 |
| H2S flow rate to flare | tons/yr | 0.86 |
| Projected hours per year | hours | 500 |
| Annual methane to flare | mmcf/yr | 1.94 |
| Annual heat input to flare | MMBtu/year | 1,940 |

| Criteria Pollutant | co | NOx | PM | PM10 | PM2.5 | S02 | voc |
|--------------------------|-------------------|----------|-------------------|-------------------|---------|-------------|------------|
| Emission factor | 46.00 | 39.00 | 15.00 | 15.00 | 15.00 | 1.88 | 0.14 |
| I 1 1 | lb/MMcf | lb/MMcf | lb/MMcf | lb/MMcf | lb/MMcf | U- (I- 1100 | lb/MMcf |
| Units | methane | methane | methane | methane | methane | lb/lb H2S | methane |
| PTE (ton/yr) | 0.04 | 0.04 | 0.01 | 0.01 | 0.01 | 1.62 | 0.14 |
| Hazardous Air Pollutants | Acetal- dehyde | Acrolein | Ethyl- benzene | Formal- dehyde | Hexane | Methanol | Total HAPs |
| Emission factor | 0.04300 | 0.01000 | 1.44400 | 1.16900 | 0.02900 | 0.00000 | |
| 11-7- | lb/MMcf | lb/MMcf | lb/MMcf | lb/MMcf | lb/MMcf | lb/MMcf | |
| Units | methane | methane | methane | methane | methane | methane | |
| PTE (ton/vr) | 0.0000 | 0.0000 | 0.0014 | 0.0011 | 0.0000 | 0.0000 | 0.0025 |

Assumptions and references:

Biogas =60% methane by volume and one (1) cubic foot of biogas has a heat capacity of 600 Btu.

CO, NOx, PM, PM10, and PM2.5 emission factors are from 2008 draft AP-42, Chapter 2.4 - Municiapal Solid Waste Landfills, Table 2.4-4 (for control by Flare).

Assumed PM = PM10 = PM2.5

Table 2.4-4 emission factors are expressed in lb per mmcf methane

The SO2 emission factor of 1.88 lb SO2/lb H2S is based on converting all HS2 in digester gas to SO2 at rate of 32 lb S/34 lb H2S * 64 lb SO2/32 lb S VOC emission factor is from AP-42, Chapter 13.5 - Industrial Flares, Table 13.5-1

HAP emission factors from Ventura County Air Pollution Control District guidance document AB 2588 Combustion Emission Factors

(http://www.vcapcd.org/pubs/Engineering/AirToxics/combem.pdf)

Used by San Joaquin Valley APCD in digester flare emission calculations

(http://www.valleyair.org/busind/pto/emission_factors/Criteria/Toxics/External%20Combustion/DairyGasExternalCombustion.xls)

Methodology:

For pollutants with lb/MMBtu emission factors

ton/year = emission factor in lb/MMBtu * Digester gas MMBtu/year * ton/2000 lb

For pollutants with lb/MMcf methane emission factors

ton/year = emission factor in lb/mmcf * Methane mmcf/year * ton/2000 lb

For SO2

ton/year = emission factor in lb/lb H2S * amount of H2S sent to flare (tons)



Appendix A: Attachment A-4
IA Butler Biogas, LLC
Application for Significant Permit Modification
Thermal Oxidizer

| Parameter | Units | Thermal oxidizer TO-01 capacity |
|------------------------------------|----------|--|
| Projected hours per year | hours | 8,760 |
| Tailgas | | |
| Tailgas flow to oxidizer | scfm | 40.00 |
| Tailgas methane to oxidizer | cfm | 2.40 |
| Annual tailgas to oxidizer | mmcf/yr | 21.02 |
| Annual tailgas methane to oxidizer | mmcf/yr | 1.26 |
| Annual H2S flow rate to oxidizer | tons/yr | 15.04 |
| Supplemental Natural Gas | | |
| Natural gas burner capacity | MMBtu/hr | 0.50 |
| Annual natural gas consumed | mmcf/yr | 4.29 |

| | CO (ton/yr) | NOx (ton/yr) | PM ton/yr) | PM10 ton/yr) | PM2.5 ton/yr) | SO2 | Voc |
|---|-------------------|--------------------|--------------------|-----------------|--------------------|------------|-------------|
| Emission factor (ton/ton) | NA | NA | NA | NA. | NA | 1.88 | NA |
| Tailgas H2S combustion | NA | NA | NA | NA | NA | 28.28 | NA |
| | | | | | | | |
| Emission factor (lb/mmcf) | 84 | 100 | 1.9 | 7.6 | 7.6 | 0.6 | 5.5 |
| | 84 0.05 | 100 0.06 | 1.9 0.00 | 7.6 | 7.6 0.00 | 0.6 | 5.5 0.00 |
| Emission factor (lb/mmcf) Tailgas methane combustion Natural gas burner | | | | | | | |

| | Organic HAPs | | | | | Metal HAPs | | | | |
|---------------------------|--------------|----------------------|-------------------|--------|---------|------------|----------|---------|-----------|--------|
| | Benzene | Dichloro- benzene | Form- aldehyde | Hexane | Toluene | Cadmium | Chromium | Lead | Manganese | Nickel |
| Emission factor (lb/mmcf) | 0.0021 | 0.0012 | 0.0075 | 1.8 | 0.0034 | 0.0011 | 0.0014 | 0.00026 | 0.00038 | 0.0021 |
| Combined units | 0.0000 | 0.0000 | 0.0000 | 0.0050 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| Highest single HAP | 0.0050 | Hexane |
|--------------------|--------|--------|
| Total HAP | 0.0050 | |

Assumptions and Methodology

Emission factors for combusting tailgas methane and natural gas are from AP-42 Section 1.4

PM10/PM2.5 emission factor = PM total

PM emission factor = PM filterable

PTE (ton/yr) = Maximum fuel usage (mmcf/yr) * Emission factor (lb/mmcf) * ton/2000 lb

Heat value of natural gas = 1020 MMBtu/mmcf

The SO2 emission factor of 1.88 lb SO2/lb H2S for tailgas H2S combustion is based on converting all HS2 in tailgas gas to SO2 at rate of 32 lb S/34 lb H2S * 64 lb SO2/32 lb S

For pollutants with lb/MMcf methane emission factors

ton/year = emission factor in lb/mmcf * Methane or natural gas mmcf/year * ton/2000 lb

For SO2 emissions from tailgas H2S combustion

ton/year = emission factor in ton/ton H2S * amount of H2S sent to flare (tons)



Appendix A: Attachment A-5
IA Butler Biogas, LLC
Application for Significant Permit Modification
Boiler

| | | | Criteria Pollutant PTE (ton/yr) | | | | | | | |
|---------------|--------------------------|-----------------------------------|---------------------------------|------|------|-------------|-------------|------|------|--|
| Emission unit | Heat input (MMBtu/hr) | Max fuel usage/yr (mmcf/yr) | CO | NOx | PM | PM10 | PM2.5 | SO2 | voc | |
| E | mission facto | r (lb/mmcf) | 84 | 100 | 1.9 | <i>7</i> .6 | <i>7</i> .6 | 0.6 | 5.5 | |
| Boiler 1 | 3 | 25.76 | 1.08 | 1.29 | 0.02 | 0.1 | 0.1 | 0.01 | 0.07 | |

| | Organic HAPs | | | | | | Metal HAPs | | | | |
|-----------------|--------------|----------------------|-------------------|--------|---------|---------|------------|---------|-----------|--------|--|
| | Benzene | Dichloro- benzene | Form- aldehyde | Hexane | Toluene | Cadmium | Chromium | Lead | Manganese | Nickel | |
| Emission factor | | | | | | | | | | | |
| (lb/mmcf) | 0.0021 | 0.0012 | 0.0075 | 1.8 | 0.0034 | 0.0011 | 0.0014 | 0.00026 | 0.00038 | 0.0021 | |
| | 0.0000 | 0.0000 | 0.0001 | 0.0232 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | |

Highest single HAP

0.0232

Hexane

Total HAP

0.0233

Assumptions and Methodology

Natural gas emission factors are from AP-42 Section 1.4

PM10/PM2.5 emission factor = PM total

PM emission factor = PM filterable

PTE (ton/yr) = Maximum fuel usage (mmcf/yr) * Emission factor (lb/mmcf) * ton/2000 lb

Heat value of natural gas

1020 MMBtu/mmcf

Rule 6-2-4 Limit

0.6 MMBtu/hr



Appendix A: Attachment A-6
IA Butler Biogas, LLC
Application for Significant Permit Modification
Unpaved Roads

Vehicle Information

| Totals | 2.0 | | 67.3 | | | 51.2 |
|-----------------------------------|-------------|-------------|----------------|-------------|--------------|-------------|
| Gas distribution truck (loaded) | 1.0 | 35.0 | 35.0 | 370 | 0.070 | 25.6 |
| Gas distribution truck (unloaded) | 1.0 | 32.25 | 32.3 | 370 | 0.070 | 25.6 |
| Type | (trip/day) | (tons/trip) | (ton/day) | (feet/trip) | (mi/trip) | (miles/yr) |
| | per day | Loaded | driven per day | distance | way distance | way miles |
| | Total trips | Weight | Total Weight | one-way | Maximum one | Maximum one |
| | | Maximum | | Maximum | | |

Average Vehicle Weight Per Trip = 33.6 tons/trip

Average Miles Per Trip = 0.07 miles/trip

Unmitigated Emission Factor, Ef = $k*[(s/12)^a]*[(W/3)^b]$ (Equation 1a from AP-42 13.2.2)

| | PM | PM10 | PM2.5 |
|-----------|------|------|-------|
| where k = | 4.9 | 1.5 | 0.15 |
| s = | 6.4 | 6.4 | 6.4 |
| a= | 0.7 | 0.9 | 0.9 |
| W = | 33.6 | 33.6 | 33.6 |
| h= | 0.45 | 0.45 | 0.45 |

lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)

% = mean % silt content of unpaved roads (Municipal Solid Waste Landfill, Table 13.2.2-1 of AP-42)

= constant (AP-42 Table 13.2.2-2 for Industrial Roads)

tons = average vehicle weight (provided by source) = constant (AP-42 Table 13.2.2-2 for Industrial Roads)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [(365 - P)/365] (Equation 2 from AP-42 13.2.2)

Mitigated Emission Factor, Eext = E * [(365 - P)/365]

where P = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

| | PM | PM10 | PM2.5 |] |
|-----------------------------------|------|------|-------|----------|
| Unmitigated Emission Factor, Ef = | 9.36 | 2.53 | 0.25 | lb/mile |
| Mitigated Emission Factor, Eext = | 6.16 | 1.66 | 0.17 |]lb/mile |

| Totals | 0.24 | 0.06 | 0.01 | 0.16 | 0.04 | 0.00 |
|-----------------------------------|-------------|-------------|--------------|-----------|-------------|--------------|
| Gas distribution truck (loaded) | 0.12 | 0.03 | 0.00 | 0.08 | 0.02 | 0.00 |
| Gas distribution truck (unloaded) | 0.12 | 0.03 | 0.00 | 0.08 | 0.02 | 0.00 |
| Process | (tons/yr) | (tons/yr) | (tons/yr) | (tons/yr) | (tons/yr) | (tons/yr) |
| | PTE of PM | PTE of PM10 | PTE of PM2.5 | PTE of PM | PTE of PM10 | PTE of PM2.5 |
| | Unmitigated | Unmitigated | Unmitigated | Mitigated | Mitigated | Mitigated |

Methodology

Total Weight driven per year (ton/year)
Maximum one-way distance (mi/trip)

Average Vehicle Weight Per Trip (ton/trip)
Average Miles Per Trip (miles/trip)

Unmitigated PTE (tons/yr) Mitigated PTE (tons/yr)

Controlled PTE (tons/yr)

= [Maximum Weight Loaded (tons/trip)] * [Total trips per year (trip/year)]

= [Maximum one-way distance (feet/trip) / [5280 ft/mile]

= SUM[Total Weight driven per year (ton/year)] / SUM[Maximum trips per year (trip/year)]

= SUM[Maximum one-way miles (miles/year)] / SUM[Maximum trips per year (trip/year)]

= (Maximum one-way miles (miles/yr)) * (Unmitigated Emission Factor (lb/mile)) * (ton/2000 lbs)

= (Maximum one-way miles (miles/yr)) * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs)

= (Mitigated PTE (tons/yr)) * (1 - Dust Control Efficiency)



AIR PERMIT APPLICATION COVER SHEET

State Form 50639 (R4 / 1-10) INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch 100 N. Senate Avenue, MC 61-53 Room 1003 Indianapolis, IN 46204-2251 Telephone: (317) 233-0178 or Toll Free: 1-800-451-6027 x30178 (within Indiana) Facsimile Number: (317) 232-6749

www.IN.gov/idem

NOTES:

- The purpose of this cover sheet is to obtain the core information needed to process the air permit application. This cover sheet is required for <u>all</u> air permit applications submitted to IDEM, OAQ. Place this cover sheet on top of all subsequent forms and attachments that encompass your air permit application packet.
- Submit the completed air permit application packet, including all forms and attachments, to IDEM Air Permits Administration using the address in the upper right hand corner of this page.
- IDEM will send a bill to collect the filing fee and any other applicable fees.
- Detailed instructions for this form are available on the Air Permit Application Forms website.

| FOR OF | FICE US | SE ONL | Υ |
|------------------|----------------------|----------|-----|
| PERMIT NUMBER: | | | |
| _ | | | |
| DATE APPLICATION | WAS W | ECEIVE | D: |
| ી | ate of Inc | Jiana | |
| JU | N 25 | 2024 | 1/0 |
| Dept of E | ovironme of Air Q | ental Mg | mt |

| 1. | Tax ID Number: | 1901(042(02)) |
|----|----------------|---------------|

| PART A: Purpose of Application | | | | | |
|--|--|--|--|--|--|
| Part A identifies the purpose of this air permit applic "source" refers to the plant site as a whole and NOT | | | | | |
| 2. Source / Company Name: IA Butler Biogas, LLC | 3. Plant ID: 033-00143 | | | | |
| 4. Billing Address: 6100 Emerald Parkway (AT | TN: IGS Legal - Dave Mrowzinski) | | | | |
| City: Dublin | State: OH ZIP Code: 43016 | | | | |
| 5. Permit Level: Exemption Registration | SSOA ⊠MSOP ☐ FESOP ☐ TVOP ☐ PBR | | | | |
| 6. Application Summary: Check all that apply. Multiple per choices selected below. | mit numbers may be assigned as needed based on the | | | | |
| ☐ Initial Permit ☐ Renewal of Operating Per | mit Asphalt General Permit | | | | |
| ☐ Review Request ☐ Revocation of Operating P | Permit Alternate Emission Factor Request | | | | |
| ☐ Interim Approval ☐ Relocation of Portable Sou | urce Acid Deposition (Phase II) | | | | |
| ☐ Site Closure ☐ Emission Reduction Credi | t Registry | | | | |
| ☐ Transition (between permit levels) From: | То: | | | | |
| ☐ Administrative Amendment: ☐ Company Name Ch | ange | | | | |
| ☐ Correction to Non-To | echnical Information | | | | |
| Other (specify): | Correction to descriptive information | | | | |
| ☑ Modification: ☑ New Emission Unit or Control Device | ☑ Modified Emission Unit or Control Device | | | | |
| ☐ New Applicable Permit Requirement | ☐ Change to Applicability of a Permit Requirement | | | | |
| ☐ Prevention of Significant Deterioration | ☐ Emission Offset ☐ MACT Preconstruction Review | | | | |
| ☐ Minor Source Modification ☐ Si | gnificant Source Modification | | | | |
| ☐ Minor Permit Modification | gnificant Permit Modification | | | | |
| Other (specify): | | | | | |
| 7. Is this an application for an initial construction and/or oper | rating permit for a "Greenfield" Source ? | | | | |
| 8. Is this an application for construction of a new emissions u | unit at an Existing Source? | | | | |

| PART B: Pre-Application Meeting |
|---|
| Part B specifies whether a meeting was held or is being requested to discuss the permit application. |
| 9. Was a meeting held between the company and IDEM prior to submitting this application to discuss the details of the project? |
| ⊠ No ☐ Yes: Date: |
| 10. Would you like to schedule a meeting with IDEM management and your permit writer to discuss the details of this project? |
| ☑ No ☐ Yes: Proposed Date for Meeting: |
| |
| PART C: Confidential Business Information |
| Part C identifies permit applications that require special care to ensure that confidential business information is kept separate from the public file. |
| Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in the Indiana Administrative Code (IAC). To ensure that your information remains confidential, refer to the IDEM, OAQ information regarding submittal of confidential business information. For more information on confidentiality for certain types of business information, please review IDEM's Nonrule Policy Document Air-031-NPD regarding Emission Data. |
| 11. Is any of the information contained within this application being claimed as Confidential Business Information? |
| ⊠ No □ Yes |
| |
| DART D. Contification Of Touth Assured Consultan |
| PART D: Certification Of Truth, Accuracy, and Completeness Part D is the official certification that the information contained within the air permit application packet is truthful, accurate, and complete. Any air permit application packet that we receive without a signed certification will be deemed incomplete and may result in denial of the permit. |
| For a Part 70 Operating Permit (TVOP) or a Source Specific Operating Agreement (SSOA), a "responsible official" as defined in 326 IAC 2-7-1(35) must certify the air permit application. For all other applicants, this person is an "authorized Individual" as defined in 326 IAC 2-1.1-1(1). |
| I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate, and complete. |
| Dave Mrowzinski Name (typed) Vice President Title |
| Signature Date |



OAQ GENERAL SOURCE DATA APPLICATION GSD-01: Basic Source Level Information

State Form 50640 (R5 / 1-10) Received INDIANA DEPARTMENTSOFFENVIRONMENTAL MANAGEMENT

JUN 25 2024

IDEM – Office of Air Quality – Permits Branch 100 N. Senate Avenue, MC 61-53 Room 1003 Indianapolis, IN 46204-2251 Telephone: (317) 233-0178 or Toll Free: 1-800-451-6027 x30178 (within Indiana) Facsimile Number: (317) 232-6749

www.IN.gov/idem

NOTES:

- Dept of Environmental Mgmt

 The purpose of GS® இந்த அலுத்து அல்று இந்த கூறிய நில்ல a required form.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims
 of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326
 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for
 public inspection.

| | PART A: Source / Compa | any Location Information |
|----------|--|--|
| 1. | Source / Company Name: IA Butler Biogas, LLC | 2. Plant ID: 033 - 00143 |
| 3. | Location Address: 1867 CR 59 | |
| | City: Butler | State : IN ZIP Code : 46271 – |
| 4. | County Name: DeKalb | 5. Township Name: Franklin |
| 6. | Geographic Coordinates: | |
| | Latitude : 41.46381561760956 N | Longitude: 84.90760590200627 W |
| 7. | Universal Transferal Mercadum Coordinates (if known | n): |
| <u> </u> | Zone: Horizontal: | Vertical: |
| 8. | Adjacent States: Is the source located within 50 miles of | f an adjacent state? |
| | ☐ No ☐ Yes - Indicate Adjacent State(s): ☐ Illinois (IL) | ⊠ Michigan (MI) ⊠ Ohio (OH) ☐ Kentucky (KY) |
| 9. | Attainment Area Designation: Is the source located within | a non-attainment area for any of the criteria air pollutants? |
| <u> </u> | No ☐ Yes – Indicate Nonattainment Pollutant(s): ☐ C | CO Pb NO _x O ₃ PM PM ₁₀ PM _{2.5} SO ₂ |
| 10. | Portable / Stationary: Is this a portable or stationary sou | urce? |
| | | |
| | PART B: Sou | rce Summary |
| 11. | . Company Internet Address (optional): | |
| 12 | . Company Name History: Has this source operated und | er any other name(s)? |
| | | company names in Part I, Company Name History. |
| 13 | . Portable Source Location History: Will the location of t | the portable source be changing in the near future? |
| | Not Applicable □ No □ Yes − Complete | Part J, Portable Source Location History, and Part K, Request to Change Location of Portable Source. |
| | | |
| 14 | Existing Approvals: Have any exemptions, registrations | s, or permits been issued to this source? |
| 14 | · · · · · · · · · · · · · · · · · · · | s, or permits been issued to this source? conding emissions units in Part M, Existing Approvals. |
| | · · · · · · · · · · · · · · · · · · · | conding emissions units in Part M, Existing Approvals. |
| | ☐ No ☐ Yes – List these permits and their corresp | conding emissions units in Part M, Existing Approvals. any unpermitted emissions units? |
| 15 | ☐ No ☐ Yes — <i>List these permits and their corresp.</i> Unpermitted Emissions Units: Does this source have a | onding emissions units in Part M, Existing Approvals. any unpermitted emissions units? s in Part N, Unpermitted Emissions Units. |
| 15 | No | any unpermitted emissions units? s in Part N, Unpermitted Emissions Units. uct or modify any emissions units? |
| 15 16 | No | conding emissions units in Part M, Existing Approvals. any unpermitted emissions units? s in Part N, Unpermitted Emissions Units. uct or modify any emissions units? in Part O, New or Modified Emissions Units. |

| PART C: Source Contact Information | | | | |
|---|---|---------------------------------------|--|--|
| IDEM will send the original, signed permit decise. This person MUST be an employee of the permittee. | | lentified in this section. | | |
| 18. Name of Source Contact Person: Dave Mrowzinski | | | | |
| 19. Title (optional): Vice President | | | | |
| 20. Mailing Address: 6100 Emerald Parkway (ATTN: IGS | Legal - Dave Mrowzinski) | | | |
| City: Dublin | State: OH | ZIP Code : 43016 – | | |
| 21. Electronic Mail Address (optional): IGS_IGDB_Permits(| @igs.com | | | |
| 22. Telephone Number : (614) 659 - 5000 | 23. Facsimile Number | (optional): () – | | |
| PART D: Authorized Individual/F | Romanaible Official Inf | | | |
| IDEM will send a copy of the permit decision to the Individual or Responsible Official is different from the | person indicated in t he Source Contact sp | his section, if the Authorized | | |
| 24. Name of Authorized Individual or Responsible Officia | al: Dave Mrowzinski | | | |
| 25. Title: Vice President | l and Dave Many minute | <u> </u> | | |
| 26. Mailing Address: 6100 Emerald Parkway (ATTN: IGS | | | | |
| City: Dublin 27. Telephone Number: (614) 659 - 5000 | State: OH 28. Facsimile Number | ZIP Code: 43016 – | | |
| 29. Request to Change the Authorized Individual or Respondence the person designated as the Authorized Individual IDEM, OAQ? The permit may list the title of the Authorized In ☐ No ☐ Yes — Change Responsible Official to: | ual or Responsible Officia | I in the official documents issued by | | |
| DADT E: Own | er Information | | | |
| 30. Company Name of Owner: IA Butler Biogas, LLC | ei iiiioiiiatioii | | | |
| 31. Name of Owner Contact Person: Dave Mrowzinski | | | | |
| 32. Mailing Address: 6100 Emerald Parkway (ATTN: IGS | l egal - Dave Mrowzinski |) | | |
| City: Dublin | State: OH | ZIP Code : 43016 – | | |
| 33. Telephone Number: (614) 659 - 5196 | 34. Facsimile Number | | | |
| 34. Operator: Does the "Owner" company also operate the s | | | | |
| | ME AS OWNER" on line 35 an | | | |
| | | | | |
| | tor Information | | | |
| 35. Company Name of Operator: Same as Owner | | | | |
| 36. Name of Operator Contact Person: | | | | |
| 37. Mailing Address: | | | | |
| City: | State: | ZIP Code: – | | |
| 38. Telephone Number: () – 39. Facsimile Number (optional): () – | | | | |

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PART G: Agent Information 40. Company Name of Agent: B Paul Consulting, LLC 41. Type of Agent: Other (specify): 42. Name of Agent Contact Person: Bernard Paul 43. Mailing Address: 285 Spring Drive City: Zionsville State: IN **ZIP Code**: 46077 -44. Electronic Mail Address (optional): bernie@bpaulconsulting.com **45. Telephone Number**: (317) 344 - 9730 46. Facsimile Number (optional): (47. Request for Follow-up: Does the "Agent" wish to receive a copy of the preliminary findings ☐ No ☐ Yes during the public notice period (if applicable) and a copy of the final determination? **PART H: Local Library Information** 48. Date application packet was filed with the local library: June 24, 2024 49. Name of Library: 50. Name of Librarian (optional): 51. Mailing Address: ZIP Code: City: State: 52. Internet Address (optional): 53. Electronic Mail Address (optional): 54. Telephone Number: (55. Facsimile Number (optional): (**PART I: Company Name History** (if applicable) Complete this section only if the source has previously operated under a legal name that is different from the name listed above in Section A. 56. Legal Name of Company 57. Dates of Use to 58. Company Name Change Request: Is the source officially requesting to change the legal name that will be printed on all official documents issued by IDEM, OAQ? ☐ Yes – Change Company Name to:

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| PAR | T J: Portable Source | Location History | (if applicable) | |
|-----|----------------------|-------------------------|-----------------|--|
| | | | | |

Complete this section only if the source is portable and the location has changed since the previous permit was issued. The current location of the source should be listed in Section A.

| 59. Plant ID | 60. Location of the Portable Source | 61. Dates at this Location |
|--------------|-------------------------------------|----------------------------|
| _ | | to |
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| <u></u> | | to |

| PART K: Request to 0 | Change Location of Portable S | Source (if applicable) | |
|--|---------------------------------|------------------------|----------|
| Complete this section to request a change of I | location for a portable source. | | |
| 62. Current Location: | | | |
| Address: | | | |
| City: | State: | ZIP Code: - | 42.4.4.1 |
| County Name: | | | |
| 63. New Location: | | | |
| Address: | | | |
| City: | State: | ZIP Code: - | |
| County Name: | | | |

| Complete this section to summerize the | PART L: Source Process Descri | ption | |
|--|-------------------------------|--------------|----------------|
| Complete this section to summarize the | | 00.010.0-1- | 07 1100 0 1 |
| 64. Process Description | 65. Products | 66. SIC Code | 67. NAICS Code |
| Digester gas production | Biogas | 4925/4953 | 562219 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| PART M: Existing Approvals (if applicable) Complete this section to summarize the approvals issued to the source since issuance of the main operating permit. | | | |
|--|---------------|-----------|--|
| | | | |
| 45195 | Entire source | 6/23/2027 | |
| 46729 | Entire source | 6/23/2027 | |
| ACTION OF THE STATE OF THE STAT | | | |
| | | | |
| | | | |

| | PART N: Unpermitted Emissions | S Units (if applicable) | | | |
|--------------------------|--|-------------------------|------------------------|--------------------|--|
| Complete this se | ction only if the source has emission units that are | not listed in any perm | it issued by IDEM, | OAQ. | |
| | | 73. Actual | 73. Actual Dates | | |
| 71. Emissions Unit ID | 72. Type of Emissions Unit | Began Construction | Completed Construction | Began Operation | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| NEW | | | [| 78. Estimated Dates | | |
|-----|----------------------------|-----------------------|--------------------------|---|--|--|
| 75. | | Begin Construction | Complete Construction | Begin Operation | | |
| | See cover letter/narrative | | | | | |
| | | | | | | |
| | | | | | | |
| | 7 2 | | E E OSIISAIGOIGII | R R S S S S S S S S S S S S S S S S S S | | |



OAQ GENERAL SOURCE DATA APPLICATION GSD-15: Government Officials Notified

State Form 51608 (R3 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch 100 N. Senate Avenue, MC 61-53 Room 1003 Indianapolis, IN 46204-2251 Telephone: (317) 233-0178 or

Toll Free: 1-800-451-6027 x30178 (within Indiana) Facsimile Number: (317) 232-6749

www.IN.gov/idem

NOTES:

- The purpose of GSD-15 is to identify local government officials that are to be notified that an air permit application has been submitted.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

| Government Officials Notified | | | | |
|--|---|------------------------------------|--|--|
| Use this table to identify local government officials that should be notified pursuant to Indiana Code (IC) 13-15-3-1 that an air permit application has been submitted. If you need additional space, you may make copies of this form. | | | | |
| 1. Name: | | 2. Date Notified: 6/24/2024 | | |
| 3. Title: DeKalb County Commissioners | | | | |
| 4. Address: 100 S Main Street | | | | |
| City: Auburn | City: Auburn State: IN ZIP Code: 46706 – | | | |
| 5. Electronic Mail: | Electronic Mail: 6. Telephone Number: () - | | | |
| 7. Method of Notification: Telephone Electronic | c Mail 🔲 Standard Mai | I 🛛 Other (specify): USPS Priority | | |
| Name: | | Date Notified: 6/24/2024 | | |
| Title: DeKalb County Council | | | | |
| Address: 100 S. Main Street | | | | |
| City: Auburn | State: IN | ZIP Code : 46706 – | | |
| Electronic Mail: Telephone Number: () - | | | | |
| Method of Notification: Telephone Electronic Mail Standard Mail Other (specify): USPS Priority | | | | |
| Name: Mike Hartman Date Notified: 6/24/2024 | | | | |
| Title: Mayor, City of Butler | | | | |
| Address: 215 S Broadway | | | | |
| City: Butler | State: IN | ZIP Code : 46721 – | | |
| Electronic Mail: mayor@butler.in.us Telephone Number: () - | | | | |
| Method of Notification: Telephone Electronic Mail Standard Mail Other (specify): USPS Priority | | | | |
| Name: | | Date Notified: | | |
| Title: | | | | |
| Address: | | | | |
| City: | State: | ZIP Code: – | | |
| Electronic Mail: | Telephone Number: (|) - | | |
| Method of Notification: Telephone Electronic Mail Standard Mail Other (specify): | | | | |



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JUN 25 2024

surance does not cover certain items. For details regarding claims exclusions see the ept of Environmental Mgmt Office of Air Quality mestic Mail Manual at http://pe.usps.com.

See International Mail Manual at http://pe.usps.com for availability and limitations of coverage.

EP14F July 2022

OD: 12 1/2 x 9 1/2

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0002

C020

SHIP TO: ATTN: INCOMING APPLICATION

46077



IDEM OAQ AIR PERMITS ADMINISTRATION

100 N SENATE AVE

INDIANAPOLIS IN 46204-2273

USPS SIGNATURE TRACKING #



9410 8361 0553 6336 5989 66

