Application for Adding a CO₂ Budget Source in an Operating Permit

| Section A – Company, Facil | ity and Contact Information | n |
|--|------------------------------|----------------------------------|
| 1. Company Information/Corporation Information | | |
| Company Name: | | |
| Company Mailing Address: | | |
| City: | State: | Zip Code: |
| Telephone Number: | E-mail Address: | |
| 2. Plant/Facility Information | | |
| Facility Name: | | |
| Facility Mailing Address: | | |
| City: | State: | Zip Code: |
| Telephone Number: | E-mail Address: | |
| Municipality: | County: | |
| Current Permit No.: | | |
| Federal Employer Identification Number (EIN): | | |
| ORIS Code: | EIA Plant Code: | |
| 3. CO ₂ Authorized Account Representative Information | | |
| Name: | Title: | |
| Mailing Address: | | |
| City: | State: | Zip Code: |
| Telephone Number: | Email: | |
| Alternate Telephone Number: | | |
| Certification of Truth, Accuracy and Co | ompleteness by a Res | ponsible Official |
| , · · · · | • | • |
| | der penalty of law in 18 Pa. | = |
| 35 P.S. § 4009(b)(2) that based on information and belief for | med after reasonable inquiry | , the statements and information |
| in this application are true, accurate and complete. | | |
| (Signature): | Date: | |
| Name (Print): | Title: | |
| | | |

| Section B – CO ₂ Budget Unit Information | | |
|---|--------------------|-----------------------------|
| PA DEP Source ID Number | Source Description | Nameplate Capacity (MWe) |
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Section C - Compliance Certification and Requirements

The CO₂ budget source and each CO₂ budget unit at the source must comply with the general provisions at 25 Pa. Code §§ 145.301—145.307, compliance requirements at 25 Pa. Code § 145.331, and monitoring, recordkeeping, and reporting requirements at 25 Pa. Code §§ 145.371—145.377.

The Department will incorporate these requirements into the facility's operating permit pursuant to 25 Pa. Code § 145.322(b).

A Compliance Certification must be submitted for the CO₂ budget source and each CO₂ budget unit at the source by March 1 following the relevant control period or initial control period (not required during an interim control period) pursuant to 25 Pa. Code § 145.331.



CO₂ Budget Source Annual Combined Heat and Power Application Form

This form satisfies the cogeneration set-aside account CO₂ Allowance Retirement application requirements pursuant to 25 Pa. Code § 145.342(k)(4). This form should be completed and submitted to the Pennsylvania Department of Environmental Protection (DEP) on or before every January 30 for the preceding allocation year.

| FACILITY & AA | R INFORMATION |
|-------------------------|---|
| FACILITY INFORMATION | Company Name |
| (SOURCE) | Facility Name |
| | EIA Plant Code |
| | Permit Number |
| | U.S. DOE/EIA Unit ID |
| | Facility Street Address |
| | City |
| | State |
| | Zip Code |
| | Authorized Account Representative (AAR) Information |
| | AAR Name |
| | COATS Account Number |
| | Title |
| | Street Address |
| | City |
| | State |
| | Zip Code |
| | Telephone Number |
| | Email Address |

| FACILITY & AAR INFORMATION CONTINUED | | |
|--------------------------------------|--|--|
| | Alternate Authorized Account Representative (AAAR) Information | |
| | AAAR Name | |
| | Title | |
| | Street Address | |
| | City | |
| | State | |
| | Zip Code | |
| | Telephone Number | |
| | Email Address | |

| COMBINED HEAT AND POWER U | INIT DATA F | PAGE OF |
|--|--|--|
| For each combined heat and power un specific information. The Unit ID enter the RGGI CO ₂ Allowance Tracking Systematered should reference those identifical calculations and supporting data on additional control of the specific calculations. | ed should correspond to the CO_2 budg stem (RGGI-COATS). The Nameplate ed in the Account Certificate of Repres | et unit as identified in Capacity (MWe) |
| Allocation Year | | |
| Source ID | | |
| U.S. DOE/EIA Unit ID | | |
| Did the combined heat and power unit operate in the reporting calendar year? | Yes | No 🗆 |
| Nameplate capacity of unit (MWe) | | |
| CO ₂ Emissions (tons) | | |
| Please describe why the unit is considered a combined heat and power unit. Attached additional sheets, if necessary. | | |
| CO ₂ Emissions (tons) from Production of Electricity Supplied to the Regional Electric Grid | | |
| CO ₂ Emissions (tons) from Production of Electricity not Supplied to the Regional Electric Grid | | |
| CO ₂ Emissions (tons) from Production of Useful Thermal Energy | | |
| Annual Gross Output (MWh) of Electricity Supplied to the Regional Electric Grid | | |
| Annual Gross Output (MWh) of Electricity not Supplied to the Regional Electric Grid | | |
| Useful Thermal Energy (MMBtu) | | |

COMBINED HEAT AND POWER UNIT DATA PAGE OF For each combined heat and power unit located at the CO₂ budget source identified, enter all unit-specific information. The Unit ID entered should correspond to the CO₂ budget unit as identified in the RGGI CO₂ Allowance Tracking System (RGGI-COATS). The Nameplate Capacity (MWe) entered should reference those identified in the Account Certificate of Representation Form. Attach calculations and supporting data on additional sheets. For CO₂ Budget Units requesting retirement of CO₂ allowances under 25 Pa. Code § 145.342(k)(3)(i), please provide the following information. Percentage of Useful Thermal Energy* (Attach Calculations) Overall Efficiency of the Combined Heat and Power Unit* (Attach Calculations) CO₂ Allowance Retirement Requested

For CO₂ Budget Units requesting partial retirement of CO₂ allowances under 25 Pa. Code § 145.342(k)(3)(ii), please provide the following information.

CO2 Allowance Retirement Requested (tons) from Eligible Electricity and Useful Thermal Energy Supplied to an Interconnected Industrial, Institutional, or Commercial Facility

Percentage of UTE = UTE / (UTE + TEO) x 100

 $OE = ((UTE + TEO) / HI) \times 100$

Where:

UTE = Useful Thermal Energy (MMBtu)

OE = Overall Efficiency

TEO = Total Electrical Output (MMBtu) = GG x 3.412

GG = Gross Generation (MWe)

HI = Total Heat Input (MMBtu)

^{*} The Percentage of Useful Thermal Energy and Overall Efficiency must be calculated as follows:

| CERTIFICATION STATEMENT | |
|---|--|
| I certify that I was selected as the CO ₂ authorized accountable | CO ₂ budget source, as applicable) by an agreement a source and each CO ₂ budget unit at the source. I my duties and responsibilities under the CO ₂ Budget of the CO ₂ budget source and of each CO ₂ budget unit all be fully bound by my representations, actions, |
| I am authorized to make this submission on behalf of the CO ₂ budget units for which the submission is made. I cerexamined, and am familiar with, the statements and informattachments. Based on my inquiry of those individuals with certify that the statements and information are to the best complete. I am aware that there are significant penalties omitting required statements and information, including the | tify under penalty of law that I have personally mation submitted in this document and all its th primary responsibility for obtaining the information, I t of my knowledge and belief true, accurate, and for submitting false statements and information or |
| Signature of Authorized Account Representative (AAR) of | or Alternate |
| Printed Name | |
| Date | |
| | |



Strategic Use Application Form

This form is used for an eligible project located in Pennsylvania to receive a distribution of CO₂ allowances to REDUCE greenhouse gas emissions through energy efficiency measures, renewable or noncarbon-emitting energy technologies, and innovative greenhouse gas emissions abatement technologies with significant greenhouse gas reduction potential pursuant to 25 Pa. Code § 145.342(j). This form should be completed and submitted to the Pennsylvania Department of Environmental Protection (DEP).

| Owner Information | |
|----------------------|---------------------------------|
| Name | |
| Mailing Address | |
| City | |
| State | |
| Zip Code | |
| Telephone Number | |
| Email Address | |
| COATS General | |
| Account Number | |
| Authorized Account R | epresentative (AAR) Information |
| AAR Name | |
| Title | |
| | |
| Street Address | |
| Street Address City | |
| | |
| City | |
| City | |

| Project Information | |
|---|--|
| Project Name | |
| Project Physical Address | |
| City | |
| State | |
| Zip Code | |
| Please describe the project. Attach additional sheets, if necessary. | |
| Attach documentation that the project will result in greenhouse gas emission reductions. | |
| Number of CO ₂ Allowances requested. | |
| Attach detailed calculations and supporting data used to determine the greenhouse gas emission reductions and an explanation of the data and the methods on which the calculations are based. | |

| CERTIFIC | CATION | STATE | MENT |
|----------|--------|-------|------|
|----------|--------|-------|------|

I certify that I was selected as the CO₂ authorized account representative or the CO₂ authorized alternate account representative by an agreement that is binding on all persons who have an ownership interest with respect to CO₂ allowances held in the general account. I certify that I have all the necessary authority to carry out my duties and responsibilities under the CO₂ Budget Trading Program on behalf of all persons and that each person shall be fully bound by my representations, actions, inactions or submissions and by any order or decision issued to me by the Department or its agent or a court regarding the general account.

I am authorized to make this submission on behalf of the owner or operator of the general account for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties under 18 Pa.C.S. § 4904 for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| Signature of Authorized Account Representative (AAR) or Alternate | | |
|---|--|--|
| | | |
| Printed Name | | |
| Date | | |
| | | |
| | | |

CO₂ Budget Source Compliance Certification Form

This form satisfies the submittal requirements for the Compliance Certification for Pennsylvania CO₂ budget units regulated under the Pennsylvania CO₂ Budget Trading Program. This form should be completed and submitted to the Pennsylvania Department of Environmental Protection (DEP) on or before March 1 following each control period, except for an interim control period.

| | R INFORMATION |
|-------------------------|--|
| FACILITY INFORMATION | Company Name |
| (SOURCE) | Facility Name |
| | EIA Plant Code |
| | Permit Number |
| | U.S. DOE/EIA Unit ID |
| | Facility Street Address |
| | City |
| | State |
| | Zip Code |
| | Authorized Account Representative (AAR) Information |
| | AAR Name |
| | |
| | Title |
| | Title Street Address |
| | |
| | Street Address |
| | Street Address City |
| | Street Address City State |
| Control Period (| Street Address City State Zip Code Telephone Number Email Address |

| CO ₂ BUDGET UNIT INFORMATION | | | |
|---|---|---|--|
| Source ID | CO ₂ Budget Unit Description | Serial # of Allowances to be Deducted | Serial # of Offset Allowances to be Deducted |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| CERTIFICATION STATEMENT | |
|--|---|
| Consistent with the compliance certification requirements budget source and each CO ₂ budget unit at the source fo operated during the calendar years covered by the report Budget Trading Program. | r which the compliance certification is submitted was |
| Signature of Authorized Account Representative (AAR) o | r Alternate |
| Printed Name | |
| Date | |
| | |

CO₂ Budget Source Quarterly Reporting Form

This form satisfies the submittal requirements for the certification of the Quarterly Report for Pennsylvania CO₂ budget units regulated under the Pennsylvania CO₂ Budget Trading Program. This form should be completed and submitted to the Pennsylvania Department of Environmental Protection (DEP) on or before every April 30, July 30, October 30 and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1 and October 1).

| FACILITY & AA | R INFORMATION |
|-------------------------|---|
| FACILITY INFORMATION | Company Name |
| (SOURCE) | Facility Name |
| | EIA Plant Code |
| | Permit Number |
| | U.S. DOE/EIA Unit ID |
| | Facility Street Address |
| | City |
| | State |
| | Zip Code |
| | Authorized Account Representative (AAR) Information |
| | AAR Name |
| | Title |
| | Street Address |
| | City |
| | State |
| | Zip Code |
| | Telephone Number |
| | Email Address |

QUARTERLY REPORT REQUIREMENT INFORMATION

The CO₂ authorized account representative shall submit quarterly reports, as follows:

- 1. The CO₂ authorized account representative shall report the CO₂ mass emissions data for the CO₂ budget unit, in an electronic format prescribed by the Administrator unless otherwise prescribed by the Administrator or the Department, for each calendar quarter.
- 2. The CO₂ authorized account representative shall submit each quarterly report to the Administrator and the Department or its agent within 30 days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in 40 CFR Part 75, Subpart H (relating to NOx mass emissions provisions) and 40 CFR 75.64 (relating to quarterly reports). Quarterly reports shall be submitted for each CO₂ budget unit, or group of units using a common stack, and shall include all the data and information required in 40 CFR Part 75, Subpart G (relating to reporting requirements) except for opacity, heat input, NO_x and SO₂ provisions.
- 3. The CO₂ authorized account representative shall submit to the Administrator or the Department a compliance certification in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all the unit's emissions are correctly and fully monitored. The certification shall state that the following conditions have been met:
 - i. The monitoring data submitted were recorded in accordance with the applicable requirements of this subchapter and 40 CFR Part 75 (relating to continuous emission monitoring), including the quality assurance procedures and specifications.
 - ii. For a unit with add-on CO₂ emissions controls and for all hours where data are substituted in accordance with 40 CFR 75.34(a)(1) (relating to units with add-on emission controls), the add-on emissions controls were operating within the range of parameters listed in the quality assurance/quality control program under 40 CFR Part 75, Appendix B (relating to quality assurance and quality control procedures) and the substitute values do not systematically underestimate CO₂ emissions.
 - iii The CO₂ concentration values substituted for missing data under 40 CFR Part 75, Subpart D (relating to missing data substitution procedures) do not systematically underestimate CO₂ emissions.

| CO ₂ BUDGET UNIT QUARTERLY DATA | | PAGE | OF | | | |
|--|-----|------|----|----|-----|--|
| For each CO ₂ budget unit located at the CO ₂ budget source identified, enter all unit-specific information. The Unit ID entered should correspond to the CO ₂ budget unit as identified in the RGGI CO ₂ Allowance Tracking System (RGGI-COATS). The Nameplate Capacity (MWe) entered should reference those identified in the Account Certificate of Representation Form. For each unit, CO ₂ emissions (tons) for the quarter and calendar year-to-date should be entered. The Emissions Collection and Monitoring Plan System (ECMPS) Feedback Report that is received by the facility for the submission of Quarterly Emissions Report to EPA for each unit should be attached with this form. | | | | | | |
| Reporting Quarter and Year | | | | | | |
| Source ID | | | | | | |
| U.S. DOE/EIA Unit ID | | | | | | |
| Did the CO ₂ budget unit operate in the reporting calendar year? | Yes | | | No | | |
| Nameplate capacity of unit (MWe) | | | | | | |
| Quarterly CO ₂ Emissions (tons) | | | | | | |
| Calendar Year-to-Date CO ₂ Emissions (tons) | | | | | | |
| Attached EPA ECMPS Feedback Report? | Yes | | | No | | |
| Are the monitoring data that are submitted, recorded in accordance with the applicable requirements of 25 Pa. Code Chapter 139 and 40 CFR Part 75, including the quality assurance procedures and specifications? | Yes | | | No | | |
| For a unit with add-on CO ₂ emissions controls and for all hours where data are substituted in accordance with 40 CFR 75.34(a)(1), were the add-on emissions controls operating within the range of parameters listed in the quality assurance/quality control program under 40 CFR Part 75 Appendix B, and do the substitute values not systematically underestimate CO ₂ emissions? | Yes | | No | | N/A | |
| Do the CO ₂ concentration values substituted for missing data under 40 CFR Part 75 Subpart D not systematically underestimate CO ₂ emissions? | Yes | | No | | N/A | |

| CERTIFICATION | STATEMENT |
|---------------|-----------|
| | |

I certify that I was selected as the CO₂ authorized account representative of the CO₂ budget source (or alternative CO₂ authorized account representative of the CO₂ budget source, as applicable) by an agreement binding with the owner or operator of the CO₂ budget source and each CO₂ budget unit at the source. I certify that I have all the necessary authority to carry out my duties and responsibilities under the CO₂ Budget Trading Program on behalf of the owners and operators of the CO₂ budget source and of each CO₂ budget unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions and by any decision or order issued to me by the Department or court of competent jurisdiction regarding the source or unit.

I am authorized to make this submission on behalf of the owners and operators of the CO₂ budget sources or CO₂ budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties under 18 Pa.C.S. § 4904 for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| Signature of Authorized Account Representative (AAR) or Alternate | | |
|---|--|--|
| | | |
| Printed Name | | |
| | | |
| Date | | |
| | | |
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| FOR (| OFFICIAL USE ONLY | |
|-------|-------------------|--|
| OP #: | | |
| Date: | | |
| | | |

OPERATING PERMIT MODIFICATION APPLICATION

| Section 1 – General Information | | | |
|--------------------------------------|---------------------------------------|------------------|------------------|
| 1.1 Application Type | | | |
| Type of permit for which application | on is made: | | |
| ☐ Minor Modification | State-Only | Operating Permit | |
| ☐ Significant Modification | odification Title V Operating Permit | | |
| Existing Operating Permit No: | | | |
| 1.2 Facility Information | | | |
| Firm Name: | | Federal Tax ID: | |
| Facility Name: | | Plant Code: | |
| NAICS Code: | | SIC Code: | |
| Description of NAICS Code: | | | |
| Description of SIC Code: | | | |
| County: | | Municipality: | |
| Latitude: | | Longitude: | |
| Horizontal Reference Datum: | Horizontal Collection Method | : | Reference Point: |
| 1.3 Permit Contact Information | | | |
| Name: | | Title: | |
| Address: | | | |
| City: | | State: | ZIP: |
| Telephone: | | | |
| Email: | | | |

| 1.4 Small Business Question | | | |
|--|--|--|--|
| Are you a small business as defined by the Pennsylvania Air Pollution Control Act? | | | |
| Are you a small business as defined by the U.S. Small Business Administration? | | | |
| 1.5 Request for Confidentiality | | | |
| Do you request any information on this application to be treated as "Confidential"? | | | |
| Place confidential information on separate page(s) marked "Confidential". | | | |
| In order to request confidential treatment for information in any document, you must submit a redacted version of the relevant document with the confidential information blacked out (and thus suitable for public disclosure), along with a letter of request containing a table identifying the page and line number of each redaction, along with a justification for each redacted item as to why it should be deemed confidential under the specific criteria allowed under 25 Pa. Code §127.12(d) and Section 13.2 of the APCA. | | | |
| 1.6 Certification of Truth, Accuracy and Completeness by a Responsible Official | | | |
| I certify that, subject to the penalties of Title 18 Pa. C.S.A. Section 4904 and 35 P.S. Section 4009(b)(2), I am the responsible official having primary responsibility for the design and operation of the facilities to which this application applies and that the information provided in this application is true, accurate, and complete to the best of my knowledge, information, and belief formed after reasonable inquiry. | | | |
| (Signed) Date: | | | |
| Name (Typed): Title: | | | |
| Telephone: | | | |
| Email: | | | |

| Jnit ID No. | Unit Name | Unit Type |
|-------------|-----------|-----------|
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| Section 3 – Facility Changes | | |
|--|--|--|
| Complete this section ONLY if the changes are for the entire facility. If changes are for a source or sources, skip this Section and complete Section 4 for each Source in which a change is proposed. | | |
| 3.1 Describe all propos | sed changes to this facility: | |
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| 3.2 If the proposed fac Attach another tabl | ility changes involve any changes in actual emise if needed. | ssions, please complete the following table. |
| Pollutant Name | CAS Number | Change in Actual Emissions (+ or -) |
| | | |
| | | |
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| | | |
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| 3.3 Anticipated date on which proposed change is scheduled to occur: | | | |
|---|-----------------------------------|---|---|
| 3.4 List the proposed revision language for the operating permit conditions. This includes all changes to the emissions, monitoring, testing, record-keeping, reporting requirements and work practice standard requirements. Write in the type of applicable requirements in the column provided. Attach another table if needed. | | | |
| Citation Number | Type of Applicable Requirement | Existing Operating Permit Condition or Condition Number | Proposed Language for Permit Condition |
| | | | |
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| O. F. Duranida a listing of all als | | . (- ddition - ond outstandtion -) | |
| 3.5 Provide a listing of all changes in chronological order (additions and subtractions) made at a facility since the last submittal and attach it to this application. For example: March 2016 - Added shot blast booth 5, exempted by the attached Request for Determination. Dec 2017 - Installed new paint line in accordance with Plan Approval XX-XXXXX | | | |
| 3.6 For renewals, please review the current operating permit. If you are proposing any changes to the conditions of the permit, please provide the condition number, the requested change, and justification for the requested change. | | | |

| Section 4 – Unit Information (duplicate this section for each unit as needed) | | | | |
|---|---|--|--|--|
| 4.1 l | Jnit Type: ☐ Combustion ☐ Incinerator | ☐ Process ☐ Control Device | | |
| 4.2 (| General Source Information (Combustion/Incine | erator/Process) | | |
| â | a. Source ID: | b. Source Name: | | |
| c | c. Manufacturer: | d. Model No.: | | |
| 6 | e. Source Description: | | | |
| f | . Rated Capacity (for engines use BHP): | g. Installation Date: | | |
| ŀ | n. Rated Power/Electric Output: | | | |
| i | . Exhaust j. Temperature: Units: | k. Exhaust Exhaust Flow % Moisture: Volume: SCFM | | |
| 4.3 (| 4.3 General Control Device Information | | | |
| a | a. Unit ID: | b. Unit Name: | | |
| c | Used by Sources: | | | |
| c | d. Type: | | | |
| 6 | e. Pressure Drop (in. H ₂ O): | f. Capture Efficiency: | | |
| ç | g. Flow Rate (specify unit): | | | |
| ŀ | n. Manufacturer: | i. Model No.: | | |
| j | . Installation Date: | | | |

4.4 Proposed Changes to Unit

| a. | Describe all propo | sed ch | anges to this unit: | | | |
|-----------------|--|---------|-----------------------------------|-------------|--|---|
| b. | If the proposed un Attach another tab | | nges involve any changes in eded. | n actual er | missions, please c | omplete the following table. |
| F | Pollutant Name | | CAS Number | | Change in Actual Emissions (+ or -) | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| C. | Anticipated date o | n whicl | h proposed change is schedu | uled to occ | ur: | |
| d. | d. List the proposed revision language for the operating permit condition. This includes all changes to the emission, monitoring, testing, record-keeping, reporting requirements and work practice standard requirement. Write in the type of applicable requirements in the column provided. Attach another table if needed. | | | | | |
| Citation Number | | r | Permi | | ng Operating t Condition or ition Number | Proposed Language for Permit Condition |
| | | | | | | |
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| Section 5 – Compliance Plan for the Facility | | | |
|--|--|-----|----|
| | | Yes | No |
| 5.1 | Will your facility be in compliance with all applicable requirements at the time of permit issuance and continue to comply with these requirements during the permit duration? | | |
| 5.2 | Will your facility be in compliance with all applicable requirements presently scheduled to take effect during the term of the permit? | | |



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Pennsylvania CO₂ Budget Trading Program

Offset Project Consistency Application Landfill Methane Capture and Destruction

Contents

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|--------|--|---|
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| 3. | Consistency Application FormsPart 1. General Information Forms | 3 |
| | Part 2. Category-Specific Information and Documentation Forms | 3 |
| Part 1 | . General Information Forms | 3 |

1. Overview

To demonstrate that a landfill methane capture and destruction project qualifies for the award of CO₂ offset allowances, a Project Sponsor must submit to the Department in accordance with these instructions, a fully completed *Offset Project Consistency Application – Landfill Methane Capture and Destruction* ("Consistency Application"), including the coversheet and all forms and related attachments. An incomplete Consistency Application will not be reviewed to determine consistency. Following these instructions will ensure that the Consistency Application contains all necessary information and is submitted properly.

Each Project Sponsor should review the Pennsylvania CO₂ Budget Trading Program regulations at 25 Pa Code §§ 145.391—145.397 (relating to CO₂ emissions offset projects) addressing offset projects and the award of CO₂ offset allowances. All offset application materials and other documents are available at www.dep.pa.gov/RGGI.

Before the *Consistency Application* can be completed, the Project Sponsor must establish a general account and obtain an offset project ID code through the RGGI CO₂ Allowance Tracking System (RGGI COATS). The Project Sponsor identified in the *Consistency Application* must be the same as the Authorized Account Representative for the RGGI COATS general account identified in the *Consistency Application*. For information about establishing a RGGI COATS general account and offset project ID code, consult the RGGI COATS User's Guide, available at http://www.rggi-coats.org.

Key eligibility dates and application submittal requirements for offset projects are asfollows:

- For offset projects commenced on or after January 1, 2009, the *Consistency Application* must be submitted within six months after the project is commenced.
- For an offset project located solely in one participating state, the *Consistency Application* must be filed with the appropriate regulatory agency in that state.
- For an offset project located in more than one participating state, the *Consistency Application* must be filed in the participating state where the majority of the CO₂-equivalent emissions reduction or carbon sequestration due to the offset project is expected to occur.

2. Submission Instructions

Submit one (1) complete hardcopy original *Consistency Application* as well as an electronic copy in the form of a CD disk to the Department at the location specified below. Submit hardcopies of forms requiring signatures as originally-signed copies and scan such signed forms for electronic submission. Facsimiles of the *Consistency Application* are not acceptable under any circumstances.

Pennsylvania Department of Environmental Protection c/o Bureau of Air Quality
Rachel Carson State Office Building, P.O. Box 8468
Harrisburg, PA 17105-8468

The Consistency Application has three parts, as described below. Each part comprises specified forms and required documentation. The Consistency Application has been created as a Microsoft Word document with editable fields. Enter information directly into the fields provided or submit information or documentation as an attachment, as directed. Include headers on all attachments indicating the form to which each is attached, the offset project name, and offset project ID code.

The Project Sponsor should save an electronic copy for his or her file to serve as a reference for any necessary remediation.

3. Consistency Application Forms

The Consistency Application includes nine (9) forms divided into three parts, as follows:

Part 1. General Information Forms

- Form 1.1 Coversheet
- Form 1.2 General Information
- Form 1.3 Attestations
- Form 1.4 Project Sponsor Agreement
- Form 1.5 Disclosure of Greenhouse Gas Emissions Data Reporting

Part 2. Category-Specific Information and Documentation Forms

- Form 2.1 Project Description
- Form 2.2 Demonstration of Eligibility
- Form 2.3 Monitoring and Verification Plan

Part 3. Independent Verification Form

Form 3.1 – Independent Verifier Certification Statement and Report

The following instructions address each of the forms in numerical order. Note that the forms themselves include many embedded instructions.

Part 1. General Information Forms

The five (5) forms in Part 1 of the *Consistency Application* address general requirements applicable to landfill methane capture and destruction offset projects. Instructions for the Part 1 forms are provided below.

Form 1.1 Coversheet

Enter the requested information in the editable text fields in the form.

Check the boxes to indicate which forms are being submitted. For information about entering the Project Sponsor, offset project name and offset project ID code, and RGGI COATS account name and number, see instructions below for Form 1.2, General Information.

Submit all forms including the Coversheet. If a required form is not submitted, the *Consistency Application* will not be considered complete for commencement of review by the Department.

Form 1.2 General Information

Enter the requested information in the editable text fields in the form. If a text field is not applicable or is unanswerable, enter "NA." Note the following:

Offset Project ID Code: Enter the offset project ID code. The offset project ID code is the alphanumeric code generated when the Project Sponsor creates a record of the offset project in the RGGI CO₂ Allowance Tracking System (RGGI COATS). See the RGGI COATS User's Guide for more information about creating an offset project record in RGGI COATS, available at http://www.rggi-coats.org.

<u>Project Information</u>: Enter project information. The name of the offset project should be the same name entered by the Project Sponsor when creating a project record in RGGI COATS. The project location entered should be the primary location of the project if the project consists of actions at multiple locations. The summary narrative of the project should indicate all locations where project actions occur or will occur.

<u>Project Sponsor</u>: Identify the Project Sponsor and provide his or her contact information. The Project Sponsor is the natural person who is the Authorized Account Representative for the RGGI COATS general account identified in the *Consistency Application*.

<u>Project Sponsor Organization</u>: Provide the full legal name of the organization the Project Sponsor represents, including any alternative names under which the organization also may be doing business (e.g., John Doe Enterprises, Inc., d/b/a JDE). If the Project Sponsor is representing himself or herself as an individual, enter "NA".

RGGI COATS General Account Name and Number: Enter the RGGI COATS general account name and number. The RGGI COATS general account identified in the *Consistency Application* is the RGGI COATS account into which any awarded CO₂ offset allowances related to the offset project will be transferred.

Form 1.3 Attestations

Sign and date the form. Submit the originally signed form as part of the paper hardcopy *Consistency Application*. Scan the signed and dated form for submission as part of the electronic version of the *Consistency Application*.

If the offset project includes an electric generation component, any and all attribute

credits generated by the offset project that may be used for compliance with a renewable

portfolio standard (RPS) or other regulatory requirement (other than awarded CO₂ offset allowances), must be transferred to the Department. If applicable, attach a copy of the Attribute Credit Transfer Agreement to this form. The attached agreement must include a header that indicates the transfer agreement is attachment to Form 1.3 and includes the offset project name and offset project ID code.

Form 1.4 Project Sponsor Agreement

Sign and date the form. Submit the originally signed form as part of the paper hardcopy *Consistency Application*. Scan the signed and dated form for submission as part of the electronic version of the *Consistency Application*.

Form 1.5 Disclosure of Greenhouse Gas Emissions Data Reporting

Check the appropriate box in the form to indicate whether greenhouse gas emissions data related to the offset project have been or will be reported to any voluntary or mandatory programs, other than the CO₂ Budget Trading Program. For each program for which data have been or will be reported, provide the program name, the program type (voluntary or mandatory), program contact information (website or street address), the categories of emissions data reported, the frequency of reporting, when the reporting began or will begin, and reporting status (prior, current, future). The Project Sponsor must disclose future reporting related to current commitments made to voluntary programs as well as future reporting mandated by current statutes, regulations, or judicial or administrative orders.

| Offset Project Name | | Offset Project ID Code |
|---------------------|--|------------------------|
| | | |

Form 1.1 – Coversheet

| Project Sponsor |
|---|
| Project Sponsor Organization |
| RGGI COATS General Account Name |
| |
| RGGI COATS General Account Number |
| Each of the following forms must be submitted. Check the boxes below to indicate that the submitted <i>Consistency Application</i> includes each of the required forms: |
| Form 1.2 – General Information |
| Form 1.3 – Attestations |
| Form 1.4 – Project Sponsor Agreement |
| Form 1.5 – Disclosure of Greenhouse Gas Emissions Data Reporting |
| Form 2.1 – Project Description |
| Form 2.2 – Demonstration of Eligibility |
| Form 2.3 – Monitoring and Verification Plan |
| Form 3.1 – Independent Verifier Certification Statement and Report |

| Offset Project Name | Offset Project ID Code | |
|---------------------|------------------------|--|
| | | |

Form 1.2 – General Information

| Project Sponsor (RGGI COATS Authorized Account Representative) | | | |
|---|---------------------------|------------------|---------------------------|
| Telephone Number | Fax Number | 7 | Email Address |
| Street Address | | | |
| City | State/Province | Postal Code | Country |
| RGGI COATS General A | ccount Name | | |
| RGGI COATS General A | ccount Number | | |
| | | | |
| Name of Offset Project | | Application Date | te |
| Summary Description o | f Offset Project | | |
| Project City | Project County P | roject State | Project Commencement Date |
| Project Sponsor Organi | zation | | |
| Primary Street Address | | | |
| City | State/Province | Postal Code | Country |
| Brief Description of Pro | ject Sponsor Organization | | |
| Telephone Number | | Website URL | |
| | | | |
| Independent Verifier (Co | ompany/Organization) | States Where V | erifier Accredited |
| Primary Street Address | | Website URL | |
| City | State/Province | Postal Code | Country |
| Point of Contact for Pro | ject | | |
| Contact Telephone Number Contact Fax Number Contact Email Address | | | |
| Contact Street Address | | | |
| City | State/Province | Postal Code | Country |
| | | | |

| Offset Project Name | Offset Project ID Code | |
|---------------------|------------------------|--|
| | | |

Form 1.3 - Attestations

The undersigned Project Sponsor certifies the truth of the following statements:

- 1. The offset project referenced in this *Consistency Application* is not required pursuant to any local, state, or federal law, regulation, or administrative or judicial order.
- 2. The offset project referenced in this *Consistency Application* has not and will not be awarded credits or allowances under any other greenhouse gas program.
- Check the boxes that apply:

 The offset project referenced in this Consistency Application does not include an electric generation component.
 The offset project referenced in this Consistency Application does include an electric generation component. Any and all attribute credits generated by the offset project that may be used for compliance with a renewable portfolio standard (RPS) or other regulatory requirement, with the exception of CO₂ allowances awarded under the CO₂ Budget Trading Program, will be transferred to the Department.

 An Attribute Credit Transfer Agreement is attached.
- 4. The offset project referenced in this *Consistency Application* has not and will not receive any funding or other incentives from the CO₂ Budget Trading Program auction proceeds.
- 5. A Consistency Application for the offset project or any portion of the offset project referenced in this Consistency Application has not been filed in any other participating state.
- 6. All offset projects for which the Project Sponsor or project sponsor organization has received CO₂ offset allowances, if any, under the Project Sponsor's or project sponsor organization's ownership or control (or under the ownership or control of any entity which controls, is controlled by, or has common control with the Project Sponsor or project sponsor organization) are in compliance with all applicable requirements of the CO₂ Budget Trading Program in all participating states.
- 7. I am authorized to make this submission on behalf of the project sponsor organization. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this *Consistency Application* and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| Project Sponsor signature | Date |
|---------------------------|--------|
| Printed name | |
| Title | |
| Organization | Notary |

| Offset Project Name | Offset Project ID Code | |
|---------------------|------------------------|--|
| | | |

Form 1.4 - Project Sponsor Agreement

The undersigned Project Sponsor recognizes and accepts that the application for, and the receipt of, CO₂ offset allowances under the CO₂ Budget Trading Program is predicated on the Project Sponsor following all the requirements under 25 Pa Code §§ 145.391—145.397. The undersigned Project Sponsor holds the legal rights to the offset project, or has been granted the right to act on behalf of a party that holds the legal rights to the offset project. The Project Sponsor understands that eligibility for the award of CO₂ offset allowance under 25 Pa Code §§ 145.391—145.397 is contingent on meeting the requirements of 25 Pa Code §§ 145.391—145.397. The Project Sponsor authorizes the Department or its agent to audit this offset project for purposes of verifying that the offset project, including the Monitoring and Verification Plan, has been implemented as described in this application. The Project Sponsor understands that this right to audit shall include the right to enter the physical location of the offset project. The Project Sponsor submits to the legal jurisdiction of the Commonwealth of Pennsylvania.

| Project Sponsor signature | Date |
|---------------------------|--------|
| Printed name | |
| Title | |
| Organization | Notary |

| Offset Project Name | Offset Project ID Code | |
|---------------------|------------------------|--|
| | | |

Form 1.5 – Disclosure of Greenhouse Gas Emissions Data Reporting

| Check the box below that applies: | |
|--|------------------------------|
| No greenhouse gas emissions data related to the offset project referenced in this Consistency Application have been or will be reported to a voluntary or mandatory program other than the CO₂ Budget Trading Program. | |
| Greenhouse gas emissions data related to the offset project referenced in this <i>Consistency Application</i> have been or will be reported to a voluntary or mandatory program other than the CO ₂ Budget Trading Program. Information for all such programs to which greenhouse gas emissions data have been or will be reported is provided below. | |
| Name of Program to which GHG Emissions Data Reported | |
| | |
| Check all that apply: | |
| Reporting is currently ongoing Reporting was conducted in the past Reporting will be conducted in the future Reporting is mandatory | Enter Frequency of Reporting |
| | |
| | Enter Reporting Start Date |
| Reporting is voluntary | |
| Program Contact Information – Address | Program Website |
| | |
| Categories of Emissions Data Reported | |
| | |
| Name of Program to which GHG Emissions Data Reported | |
| | |
| Check all that apply: | |
| Reporting is currently ongoing | Enter Frequency of Reporting |
| Reporting was conducted in the past Reporting will be conducted in the future Reporting is mandatory | |
| | Enter Reporting Start Date |
| Reporting is voluntary | |
| Program Contact Information – Address | Program Website |
| | |
| Categories of Emissions Data Reported | |

Add extra pages as needed.

Part 2. Category-Specific Information and Documentation Forms

The three (3) forms in Part 2 of the *Consistency Application* address category-specific requirements and documentation for landfill methane capture and destruction offset projects. Instructions for the Part 2 forms are provided below.

Form 2.1 Project Description

Attach a detailed narrative of the actions to be taken as part of the offset project. The attached narrative must include a header that indicates it as an attachment to Form 2.1 and identifies the offset project name and offset project ID code. The narrative must include the following information:

- 1. Type of Project. Indicate the type of project:
 - a. Flaring offset project Landfill employs an active gas collection system. The flaring system can utilize either an open or enclosed flare.
 - b. Electricity generation offset project Landfill gas is used as a fuel for internal combustion engines, gas turbines, or boilers to produce electricity.
 - c. Direct-use offset project Landfill installs a system that enables an end user to utilize collected landfill gas for direct use as a valuable fuel source.
- 2. <u>Project Owner and Operator Information</u>. Provide organization legal name(s), point(s) of contact information, and physical address for the offset project owner and offset project operator. Provide organization legal name, point(s) of contact information, and physical address for the parent company if the owner or operator is a subsidiary.
- 3. <u>Landfill Location and Specifications</u>. Provide the following information and include as an appendix to the narrative a copy of the state or local operating permit for the landfill where the offset project and landfill gas collection systemare located:
 - a. Landfill location (city, state, zip code) and site I.D. number from the state or local operating permit;
 - Types of waste accepted (municipal solid waste, non-hazardous sludge, industrial waste, construction and demolition debris, medical waste, or specify other) as stated in the state or local operating permit;
 - c. Opening year from state or local operating permit;
 - d. Closing year (if applicable) or estimated date of closure from state or local operating permit or approved closure plan;
 - e. Total design waste capacity (specify cubic feet or tons) from state or local operating permit;
 - f. Current area (specify hectares or acres) devoted to landfilling from the state or local operating permit, or if not available, from contour maps and filling plans;

- g. Average waste depth (in feet) from state or local operating permit, or if not available, from contour maps and filling plans;
- h. Total waste in place from weigh scale records, most recent annual report, or other documented source;
- i. Waste characteristics (food waste, wood, plastics, metal, paper, and specify other) represented as either percent of total mass or volume currently accepted, from weigh scale records of waste characterization and site-specific density records:
- j. Annual quantity of accepted waste (specify cubic feet or tons) for most recent year from weigh scale records, most recent annual report, or other documented source: and
- k. Average annual rainfall for location of landfill from NOAA's National Climatic Data Center (NCDC).
- 4. <u>Landfill Owner and Operator Information</u>. Provide organization legal name(s), point(s) of contact information, and physical address for the landfill owner and landfill operator. Include organization legal name, point(s) of contact information, and physical address for the parent company if the owner or operator is a subsidiary.
- 5. <u>Equipment Specifications and Technical Schematic</u>. Provide the following offset project equipment specifications:
 - a. Landfill gas collection equipment and landfill gas flow and composition monitoring equipment specifications including:
 - i. Type(s) of equipment and manufacturer(s);
 - ii. Dates of installation;
 - iii. Dates of initial calibration;
 - iv. Design landfill gas flow capacity (standard cubic feet per minute);
 - v. Installed landfill gas flow meter accuracy; and
 - vi. Methane concentration instrument thresholds (percent by volume) and methane concentration instrument precision and accuracy levels as specified by the manufacturer.
 - b. For on-site flare projects:
 - i. Type of flare(s) (open, enclosed, or specify other) and manufacturer(s); and
 - ii. Design capacity of flare flow rate in standard cubic feet per minute as specified by the manufacturer.
 - c. For on-site or off-site electricity generation projects:
 - i. Type of electricity generation technology (reciprocating engine, gas turbine, cogeneration, microturbine, steam turbine, combined cycle, organic Rankine cycle, or specify other);
 - ii. Make (or model), manufacturer, and date of installation of combustion unit;

- iii. Design electricity generation capacity in units of MWe, as specified by the manufacturer;
- iv. Heat rate of combustion (Btu/kWh), as specified by the manufacturer; and
- v. Name, address, and point(s) of contact for each off-site purchaser of landfill gas.
- d. For on-site or off-site direct-use projects:
 - Type of direct-use project (boiler, direct thermal, leachate evaporation, high-Btu quality fuel, medium-Btu quality fuel, methanol synthesis, or specify other);
 - ii. Make (or model), manufacturer, and date of installation of combustion unit;
 - iii. Pipeline length, diameter, and material type as documented by the state or local operating permit; and
 - iv. Name, address, and point(s) of contact for each off-site purchaser of landfill gas.
- e. A technical schematic outlining the overall landfill gas capture and destruction system for the type of offset project (flare, electricity generation, or on-site or offsite direct use). The schematic must trace the landfill methane from source to destruction by combustion.

Form 2.2 Demonstration of Eligibility

Attach documentation, with state and federal identification numbers, as applicable, that indicates that the landfill from which the offset project will draw landfill gas is not subject to federal New Source Performance Standards (NSPS) for municipal solid waste landfills, 40 CFR Part 60, Subpart Cc and Subpart WWW. The documentation must include the initial design capacity report submitted to the U.S. EPA pursuant to 40 CFR 60, Subpart WWW 60.752(a) or 40 CFR 60, Subpart Cc 60.33c(d), and in accordance with 40 CFR 60, Subpart WWW 60.757(a)(2).

Note that for purposes of eligibility under 25 Pa Code § 145.395(a)(1), a MSW landfill is considered to be subject to NSPS at 40 CFR 60, Subparts Cc and WWW if thelandfill is subject to the federal emissions requirements at 40 CFR 60, Subpart Cc 60.33c(e) or Subpart WWW 60.752(b).

Each attachment must include a header that indicates it is an attachment to Form 2.2 and includes the offset project name and offset project ID code.

Form 2.3 Monitoring and Verification (M&V) Plan

Provide the Monitoring and Verification Plan (M&V Plan) as an attachment to Form 2.3. The M&V Plan must include a header that indicates it is an attachment to Form 2.3 and includes the offset project name and offset project ID code. Check the boxes to indicate that the attached M&V Plan includes required components.

The M&V Plan must include the following:

- 1. <u>Procedures for Quantifying Annual CO₂-equivalent Emissions Reductions</u>. Specify the data source(s) and the calculations to be used to determine emission reductions.
- 2. <u>Procedures for Quantifying Annual Volume of Methane Collected</u>. Specify the data sources and calculations to be used for quantifying in standard cubic feet (scf) annual volume of methane collected.
- 3. Procedures for Quantifying Mass of Methane per Cubic Foot of Methane. Specify whether the default value of 0.04246 lbs/scf at 1 atmosphere and 20° C will be used, or specify the procedures that will be used to monitor temperature and pressure, derive an alternate representative temperature, and the data sources and value for the appropriate mass of CH₄ per standard cubic foot of methane (lbs/scf).
- 4. Quality Assurance/Quality Control (QA/QC) Program for Measuring Equipment. Document the QA/QC program, including the following:
 - a. Procedures for recording names and contact information for: personnel responsible for recording measurements and data entry, QA/QC managers, and third-party analytical laboratory;
 - b. Procedures for designated personnel to keep landfill gas sales records (in MMBtu or standard cubic feet), electricity sales records, records of measured heat rate of combustion device if applicable, and records of newly installed equipment and retired equipment;
 - c. Procedures for annual comparison of collected methane measured by monitoring equipment with calculated methane in landfill gas used to generate electricity or sold for direct use, noting any discrepancies;
 - d. Calculation procedures for standardizing landfill gas flow that correct for documented site-specific temperature and pressure measurements. (This procedure is not necessary when using flow meters that automatically measure temperature and pressure and express landfill gas flow in standard cubic feet); and
 - e. Description of the contents of an annual quality control report describing the procedures for QA/QC of landfill gas collection and monitoring equipment during the reporting period and a schedule for the annual completion of such report. The report should identify findings of quarterly reviews, issues encountered, and remedial actions taken.

- Maintenance, Operation, and Calibration of Measuring and Monitoring Equipment.
 Document the protocol for maintenance, operation, and calibration of measuring and monitoring equipment, including the following:
 - a. <u>Maintenance of Measuring and Monitoring Equipment</u>. Document the protocol that will be used to ensure that the following required actions are performed and documented:
 - Records are kept of landfill gas flow rate performance tests at least monthly to ensure:
 - (A) flow readings are recorded at least every 15 minutes;
 - (B) the accuracy of landfill gas flow meter readings is within +/- 5 percent of manufacturer specifications; and
 - (C) methane concentration instrument manufacturer specifications for precision and accuracy are met; and
 - ii. Maintenance schedules for landfill gas flow meter and methane concentration instrument (for permanent and/or portable equipment) are performed in accordance with manufacturer recommendations and specifications.
 - b. <u>Operation of Measuring and Monitoring Equipment</u>. Document the protocol that will be used to ensure that the following required actions are performed and documented:
 - Records are kept at least daily of collected landfill gas flow rates and methane concentration;
 - ii. Records are kept on a monthly basis of the number of hours that the landfill gas collection system was not in operation;
 - iii. Records are kept on a monthly basis of the number of hours that the combustion device (e.g., flare, boiler, electricity generation unit) was not in operation:
 - iv. Records are kept on a monthly basis of the calculation of landfill gas flow rate standardization (in standard cubic feet per day) to correct for sitespecific pressure and temperature measurements. (This procedure is not necessary when using flow meters that automatically measure temperature and pressure and express landfill gas flow in standard cubic feet);
 - Records are kept on an annual basis of the measured heat rate of combustion of the electric generation unit(s) (in Btu/kWh) in accordance with manufacturer specifications for landfill gas, if applicable to the offset project; and
 - vi. Records are kept on a monthly basis of the amount of landfill gas combusted in standard cubic feet (scf) in the combustion device.
 - c. <u>Calibration of Measuring and Monitoring Equipment</u>. Document the protocol that will be used to ensure that the following required actions are performed and documented:
 - i. Records are kept of calibration procedures for landfill gas flow monitoring equipment as specified by the manufacturer;

- Records are kept of calibration procedures for permanent methane concentration measurement equipment as specified by the manufacturer; and
- iii. Calibration schedules for landfill gas flow meter and methane concentration instrument (for permanent and/or portable equipment) are maintained in accordance with manufacturer recommendations and specifications.
- 6. <u>Records Retention</u>. Document the recordkeeping protocol that will be used to maintain record keeping throughout the duration of the offset project, including maintenance of an electronic index of all material to be collected, and storage procedures to ensure maintenance of collected information in electronic and/or hardcopy form for the following required information:
 - a. QA/QC Program for Measuring Equipment.
 - i. Names and contact information for the following:
 - (A) personnel responsible for recording measurements;
 - (B) personnel responsible for data entry;
 - (C) QA/QC managers; and
 - (D) third-party analytical laboratory; and
 - ii. Annual QA/QC reports and the associated findings and remedial actions taken; and
 - iii. Annual comparison of collected methane as measured by monitoring equipment with calculated methane used to generate electricity or landfill gas sold, if applicable to the offset project.
 - b. Maintenance of Measuring and Monitoring Equipment.
 - Records of all installed equipment and retired equipment related to landfill gas collection system and landfill gas combustion;
 - ii. Landfill gas flow meter performance tests for each month;
 - iii. Methane concentration instrument performance tests for each month; and
 - Maintenance schedules for landfill gas flow meter and methane concentration instrument.
 - c. Operation of Measuring and Monitoring Equipment.
 - Landfill gas sales records (in MMBtu or standard cubic feet of methane) or electricity sales records (in kWh) for each month, if applicable to the offset project;
 - ii. Landfill gas flow meter readings in at least 15-minute intervals;
 - iii. Methane concentration instrument readings in at least daily intervals;
 - iv. Landfill gas collection system operating hours for each month;
 - v. Combustion device operating hours for each month;
 - vi. Landfill gas flow meter pressure and temperature measurements for each month;

- vii. Heat rate of combustion of electric generation unit(s) for reporting year, if applicable to the offset project; and
- viii. Methane combustion data for combustion device in at least 15-minute intervals.
- d. Calibration of Measuring and Monitoring Equipment.
 - Calibration procedures and schedules for landfill gas flow meter and methane concentration instrument (for permanent and/or portable equipment).
- 7. Independent Verification of Landfill Gas Methane Composition. Document the process that will be used to perform annual third-party analysis of sampled landfill gas methane composition. Provide as an appendix to the M&V Plan a copy of the contract (with financial information redacted) for annual third-party laboratory analysis of sampled landfill gas using U.S. EPA-approved laboratory testing methods (e.g., see U.S. EPA Method 3C available at: http://www.epa.gov/ttn/emc/promgate.html). Document the protocol that will be used to ensure that the landfill gas samples will be taken at the same location as the landfill gas flow meter.

| Offset Project Name | Offset Project ID Code |
|---------------------|------------------------|
| | |

Form 2.1 - Project Description

Attach a detailed narrative of the actions to be taken as part of the offset project. The attached narrative must include a header that indicates it is an attachment to Form 2.1 and identifies the offset project name and offset project ID code.

| 0110 | Ot P | rojost hamo and choct project ib code. |
|------|------|---|
| | | the boxes below to indicate that the detailed narrative of the offset project includes the ng required information: |
| | 1. | Type of project |
| | 2. | Project owner and operator information |
| | 3. | Landfill location and specifications |
| | 4. | Landfill owner and operator information |
| | 5. | Equipment specifications and technical schematic |
| | | |

| Offset Project Name | Offset Project ID Code |
|---------------------|-------------------------|
| | |
| Form 2.2 – Demon | stration of Fligibility |

Attach documentation that the offset project meets eligibility requirements. Attached documentation must include a header that indicates it is an attachment to Form 2.2 and includes the offset project name and offset project ID code.

| Check the box below to indicate that the following required documentation is attached: | |
|--|------------------------|
| Documentation that the landfill methane offset project will occur at a landfill not subject federal New Source Performance Standards (NSPS) for municipal solid waste landfills, CFR Part 60 Subpart Cc and Subpart WWW. Documentation must include the initial decapacity report submitted to the U.S. EPA pursuant to 40 CFR 60, Subpart WWW 60.75 or 40 CFR 60, Subpart Cc 60.33c(d), and in accordance with 40 CFR 60, Subpart WWW 60.757(a)(2). | , 40 esign 52(a) |

| Offset Project Name | Offset Project ID Code |
|---------------------|------------------------|
| | |

Form 2.3 – Monitoring and Verification Plan

Attach the Monitoring and Verification Plan (M&V Plan). The M&V Plan must include a header that indicates it is an attachment to Form 2.3 and includes the offset project name and offset project ID code.

Check the boxes below to indicate that the attached M&V Plan includes the following required information:
1. Procedures for quantifying annual CO₂-equivalent emissions reductions
2. Procedures for quantifying annual volume of methane collected
3. Procedures for quantifying mass of methane per cubic feet of methane
4. Documentation of the quality assurance/quality control (QA/QC) program for measuring equipment
5. Documentation of the protocol for maintenance, operation, and calibration of measuring and monitoring equipment
6. Documentation of the protocol for records retention

7. Documentation of the process for independent verification of landfill gas methane

composition

Part 3. Independent Verification Form

The form in Part 3 of the *Consistency Application* addresses the requirements and documentation related to the independent verifier certification statement and report. Instructions for the form in Part 3 are provided below.

Form 3.1 Independent Verifier Certification Statement and Report

An accredited independent verifier must sign and date the form. Submit the originally signed form as part of the paper hardcopy of the *Consistency Application*. Scan the signed and dated form for submission as part of the electronic version of the *Consistency Application*.

Provide the independent verifier report as an attachment to Form 3.1. The verifier report must include a header that indicates it is an attachment to Form 3.1 and includes the offset project name and offset project ID code.

The verifier report must document the following:

- The verifier has reviewed the entire Consistency Application and evaluated the contents of the application in relation to the applicable requirements of 25 Pa Code §§ 145.391—145.397.
- 2. The verifier has evaluated the adequacy and validity of information supplied by the Project Sponsor to demonstrate that the offset project meets the applicable eligibility requirements of 25 Pa Code § 145.393, § 145.394 and § 145.395
- 3. The verifier has evaluated the adequacy of the monitoring and verification plan submitted pursuant to 25 Pa. Code § 145.395

The verifier report must include the following contents, in the order listed below:

- Cover page with report title and date
- Table of contents
- List of acronyms and abbreviations
- Executive summary
- Description of objective of report
- Identification of the client, including name, address, and other contact information
- Identification of the offset project
- Description of evaluation criteria (applicable regulatory provisions and documentation requirements specified in Consistency Application)
- Description of the review and evaluation process, including any site visits and interviews
- Identification of individuals performing the verification work, including the verification team leader and key personnel, and contact information for the team leader
- Description of the materials provided to the verifier by the Project Sponsor
- Evaluation conclusions and findings, including level of assurance provided

| Offse | t Project Name | | Offset Project ID Code | |
|-------------------------------|--|-----------|--|--|
| | | | | |
| | Form 3.1 – Independent Verifier | C | ertification Statement and Report | |
| inde _l is an | • • • • • • • • • • • • • • • • • • • | er | d date Form 3.1. Attach the accredited report must include a header that indicates it fset project name and offset project ID code | |
| | , | | | |
| I cer <i>Appl</i> follo | lication, including all forms and attachment | rio S, | dentified above reviewed the <i>Consistency</i> in its entirety, including a review of the | |
| (a) | a) The adequacy and validity of information supplied by the Project Sponsor to demonstrate that the offset project meets the applicable eligibility requirements under 25 Pa Code § 145.393, § 145.394 and § 145.395, including the required documentation that must be provided in the <i>Consistency Application</i> . | | | |
| (b) | The adequacy of the Monitoring and Verification Plan in accordance with the applicable requirements of 25 Pa. Code § 145.395 including the required documentation that must be provided in the <i>Consistency Application</i> . | | | |
| | rification report is attached that documents includes evaluation conclusions and findin | | he verifier's review of the items listed above s. | |
| | Verifier Representative signature | | Date | |
| | Printed name | | | |
| | Title | | | |
| | | | Notary | |



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Pennsylvania CO₂ Budget Trading Program

Offset Project Consistency Application
Avoided Methane Emissions from Agricultural Manure Management

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1. Overview

To demonstrate that an agricultural manure management offset project qualifies for the award of CO₂ offset allowances, a Project Sponsor must submit to the Department in accordance with these instructions, a fully completed *Offset Project Consistency Application – Avoided Methane Emissions from Agricultural Manure Management* ("Consistency Application"), including the coversheet and all forms and related attachments. An incomplete Consistency Application will not be reviewed to determine consistency. Following these instructions will ensure that the Consistency Application contains all necessary information and is submitted properly.

Each Project Sponsor should review the CO₂ Budget Trading Program regulations at 25 Pa Code §§ 145.391—145.397 (relating to CO₂ emissions offset projects) addressing offset projects and the award of CO₂ offset allowances. All offset application materials and other documents are available at www.dep.pa.gov/RGGI.

Before the Consistency Application can be completed, the Project Sponsor must establish a general account and obtain an offset project ID code through the RGGI CO₂ Allowance Tracking System (RGGI COATS). The Project Sponsor identified in the Consistency Application must be the same as the Authorized Account Representative for the RGGI COATS general account identified in the Consistency Application. For information about establishing a RGGI COATS general account and offset project ID code, consult the RGGI COATS User's Guide, available at http://www.rggi-coats.org.

Key eligibility dates and application submittal requirements for offset projects are as follows:

- For offset projects commenced on or after January 1, 2009, the *Consistency Application* must be submitted within six months after the project is commenced.
- For an offset project located in one participating state, the *Consistency Application* must be filed with the appropriate regulatory agency in that state.
- For an offset project located in more than one participating state, the *Consistency Application* must be filed in the participating state where the majority of the CO₂-equivalent emissions reduction due to the offset project is expected to occur.

2. Submission Instructions

Submit one (1) complete hardcopy original *Consistency Application* and one (1) electronic copy in the form of a CD disk to the Department at the location specified below. Submit hardcopies of forms requiring signatures as originally-signed copies and scan such signed forms for electronic submission. Facsimiles of the *Consistency Application* are not acceptable under any circumstances.

Pennsylvania Department of Environmental Protection c/o Bureau of Air Quality Rachel Carson State Office Building, P.O. Box 8468 Harrisburg, PA 17105-8468 The *Consistency Application* has three parts, as described below. Each part comprises specified forms and required documentation. The *Consistency Application* has been created as a Microsoft Word document with editable fields. Enter information directly in the fields provided or submit information or documentation as an attachment, as directed. Include headers on all attachments indicating the form to which each is attached, the offset project name, and offset project ID code.

The Project Sponsor should save an electronic copy for his or her file to serve as a reference for any necessary remediation.

3. Consistency Application Forms

The Consistency Application includes nine (9) forms divided into three parts, as follows:

Part 1. General Information Forms

- Form 1.1 Coversheet
- Form 1.2 General Information
- Form 1.3 Attestations
- Form 1.4 Project Sponsor Agreement
- Form 1.5 Disclosure of Greenhouse Gas Emissions Data Reporting

Part 2. Category-Specific Information and Documentation Forms

- Form 2.1 Project Description
- Form 2.2 Demonstration of Eligibility
- Form 2.3 Monitoring and Verification Plan

Part 3. Independent Verification Form

Form 3.1 – Independent Verifier Certification Statement and Report

The following instructions address each of the forms in numerical order. Note that the forms themselves include many embedded instructions.

Part 1. General Information Forms

The five (5) forms in Part 1 of the *Consistency Application* address general requirements applicable to agricultural manure management offset projects. Instructions for the Part 1 forms are provided below.

Form 1.1 Coversheet

Enter the requested information in the editable text fields in the form.

Check the boxes to indicate which forms are being submitted. For information about entering the Project Sponsor, offset project name and offset project ID code, and RGGI COATS account name and number, see instructions below for Form 1.2, General Information.

Submit all forms including the Coversheet. If a required form is not submitted, the Consistency Application will not be considered complete for commencement of review by the Department.

Form 1.2 General Information Form

Enter the requested information in the editable text fields in the form. If a text field is not applicable or is unanswerable, enter "NA." Note the following:

Offset Project ID Code: Enter the offset project ID code. The offset project ID code is the alphanumeric code generated when the Project Sponsor creates a record of the offset project in the RGGI CO₂ Allowance Tracking System (RGGI COATS). See the RGGI COATS User's Guide for more information about creating an offset project record in RGGI COATS, available at http://www.rggi-coats.org.

<u>Project Information</u>: Enter project information. The name of the offset project should be the same name entered by the Project Sponsor when creating a project record in RGGI COATS. The project location entered should be the primary location of the project if the project consists of actions at multiple locations. The summary narrative of the project should indicate all locations where project actions occur or will occur.

<u>Project Sponsor</u>: Identify the Project Sponsor and provide his or her contact information. The Project Sponsor is the natural person who is the Authorized Account Representative for the RGGI COATS general account identified in the *Consistency Application*.

<u>Project Sponsor Organization</u>: Provide the full legal name of the organization the Project Sponsor represents, including any alternative names under which the organization also may be doing business (e.g., John Doe Enterprises, Inc., d/b/a JDE). If the Project Sponsor is representing himself or herself as an individual, enter "NA".

RGGI COATS General Account Name and Number: Enter the RGGI COATS general account name and number. The RGGI COATS general account identified in the *Consistency Application* is the RGGI COATS account into which any awarded CO₂ offset allowances related to the offset project will be transferred.

Form 1.3 Attestations

Check the boxes that apply and sign and date the form. Submit the originally signed form as part of the paper hardcopy *Consistency Application*. Scan the signed and dated form for submission as part of the electronic version of the *Consistency Application*. If applicable, attach a copy of the Attribute Credit Transfer Agreement to Form 1.3. The attached agreement must include a header that indicates it is an attachment to Form 1.3 and includes the offset project name and offset project ID code.

Form 1.4 Project Sponsor Agreement

Sign and date the form. Submit the originally signed form as part of the paper hardcopy *Consistency Application*. Scan the signed and dated form for submission as part of the electronic version of the *Consistency Application*.

Form 1.5 Disclosure of Greenhouse Gas Emissions Data Reporting

Check the appropriate box in the form to indicate whether greenhouse gas emissions data related to the offset project have been or will be reported to any voluntary or mandatory programs, other than the CO₂ Budget Trading Program. For each program for which data have been or will be reported, provide the program name, the program type (voluntary or mandatory), program contact information (website or street address), the categories of emissions data reported, the frequency of reporting, when the reporting began or will begin, and reporting status (prior, current, future). The Project Sponsor must disclose future reporting related to current commitments made to voluntary programs as well as future reporting mandated by current statutes, regulations, or judicial or administrative orders.

| Offset Project Name | Of | Offset Project ID Code | |
|---------------------|----|------------------------|--|
| | | | |

Form 1.1 – Coversheet

| Proje | ect Sponsor | | |
|--------------------------------|---|--|--|
| Proje | ct Sponsor Organization | | |
| RGGI | I COATS General Account Name | | |
| | | | |
| RGGI | I COATS General Account Number | | |
| | | | |
| | of the following forms must be submitted. Check the boxes below to indicate that the nitted <i>Consistency Application</i> includes each of the required forms: | | |
| □ F | Form 1.2 – General Information | | |
| ΗF | Form 1.3 – Attestations | | |
| Ħρ | Form 1.4 – Project Sponsor Agreement | | |
| ΗF | Form 1.5 – Disclosure of Greenhouse Gas Emissions Data Reporting | | |
| Form 2.1 – Project Description | | | |
| | Form 2.2 – Demonstration of Eligibility | | |
| | Form 2.3 – Monitoring and Verification Plan | | |
| | Form 3.1 – Independent Verifier Certification Statement and Report | | |

| Offset Project Name | Offset Project ID Code | |
|---------------------|------------------------|--|
| | | |

Form 1.2 – General Information

| Project Sponsor (RGGI COATS Authorized Account Representative) | | | | |
|--|------------------------|------------------|---------------------------|--|
| Telephone Number | Fax Number | | Email Address | |
| Street Address | | | | |
| Street Address | | | | |
| City | State/Province | Postal Code | Country | |
| | | | | |
| RGGI COATS General Acco | ount Name | | | |
| RGGI COATS General Acco | ount Number | | | |
| | | | | |
| Name of Offset Project | | Application Date | | |
| Summary Description of O | ffset Project | | | |
| Project City | Project County Project | t State | Project Commencement Date | |
| Project Sponsor Organizat | ion | | | |
| Primary Street Address | | | | |
| City | State/Province | Postal Code | Country | |
| | | | | |
| Brief Description of Project | t Sponsor Organization | I | I | |
| Telephone Number | | Website URL | | |
| | | | <u> </u> | |
| Independent Verifier (Comp | oany/Organization) | States Where Ver | ifier Accredited | |
| Primary Street Address | | Website URL | | |
| City | State/Province | Postal Code | Country | |
| | State/F10VIIICe | - Cotal Code | Country | |
| Point of Contact for Projec | t | | | |
| Contact Telephone Numbe | r Contact Fax Numb | per | Contact Email Address | |
| - | | | | |
| Contact Street Address | | | | |
| City | State/Province | Postal Code | Country | |
| | | | | |

| Offset Project Name | Offset Project ID Code |
|---------------------|------------------------|
| | |

Form 1.3 – Attestations

The undersigned Project Sponsor certifies the truth of the following statements:

- The offset project referenced in this *Consistency Application* is not required pursuant to any local, state, or federal law, regulation, or administrative or judicial order.

| 2. | The offset project referenced in this <i>Consistency Application</i> has not and will not be awarded credits or allowances under any other greenhouse gas program. |
|----|--|
| 3. | Check the boxes that apply: |
| | The offset project referenced in this <i>Consistency Application</i> has not and will not receive any funding or other incentives from the CO ₂ Budget Trading Program auction proceeds. |
| | The offset project referenced in this Consistency Application <u>has received or will receive</u> funding or other incentives from the CO₂ Budget Trading Program auction proceeds. However, the following conditions apply: |
| | The offset project is located in a state with a market penetration rate for anaerobic digester projects of 5 percent or less. Documentation that the offset project meets this criterion is attached to Form 2.2. |
| | The offset project is located at a farm with 4,000 or less head of dairy cows or equivalent animal units. Documentation that the offset project meets this criterion is attached to Form 2.2. |
| | ☐ The offset project is a regional-type digester designed for animal manure input less than the average annual manure produced by a farm with 4,000 or less head of dairy cows or equivalent animal units. Documentation that the offset project meets this criterion is attached to Form 2.2. |
| 1. | Check the boxes that apply: |
| | The offset project referenced in this Consistency Application does not include an electric generation component. |
| | The offset project referenced in this <i>Consistency Application</i> does include an electric generation component. However, the following conditions apply: |
| | Any and all attribute credits generated by the offset project that may be used for compliance with a renewable portfolio standard (RPS) or other regulatory requirement, with the exception of CO ₂ allowances awarded under the CO ₂ Budget Trading Program, will be transferred to the Department. An Attribute Credit Transfer Agreement is attached. |
| | The offset project is located in a state with a market penetration rate for anaerobic digester projects of 5 percent or less. Documentation that the offset project meets this criterion is attached to Form 2.2. |
| | The offset project is located at a farm with 4,000 or less head of dairy cows or equivalent animal units. Documentation that the offset project meets this criterion is attached to Form 2.2. |
| | ☐ The offset project is a regional-type digester designed for animal manure input less than the average annual manure produced by a farm with 4,000 or less head of dairy cows or equivalent animal units. Documentation that the offset project meets this criterion is attached to Form 2.2. |

A Consistency Application for the offset project or any portion of the offset project referenced in this Consistency Application has not been filed in any other participating state.

| Offset Project Name | Offset Project ID Code | |
|---------------------|------------------------|--|
| | | |

- 6. All offset projects for which the Project Sponsor or project sponsor organization has received CO₂ offset allowances, if any, under the Project Sponsor's or project sponsor organization's ownership or control (or under the ownership or control of any entity which controls, is controlled by, or has common control with the Project Sponsor or project sponsor organization) are in compliance with all applicable requirements of the CO₂ Budget Trading Program in all participating states.
- 7. I am authorized to make this submission on behalf of the project sponsor organization. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this *Consistency Application* and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| Project Sponsor signature | Date |
|---------------------------|--------|
| 3, | |
| | |
| | |
| Printed name | |
| 1 miled mame | |
| | |
| | |
| Title | |
| Title | |
| | |
| | |
| | |
| Organization | Notary |

| Offset Project Name | Offset Project ID Code | |
|---------------------|------------------------|--|
| | | |

Form 1.4 - Project Sponsor Agreement

The undersigned Project Sponsor recognizes and accepts that the application for, and the receipt of, CO₂ offset allowances under the CO₂ Budget Trading Program is predicated on the Project Sponsor following all the requirements of 25 Pa Code §§ 145.391—145.397. The undersigned Project Sponsor holds the legal rights to the offset project, or has been granted the right to act on behalf of a party that holds the legal rights to the offset project. The Project Sponsor understands that eligibility for the award of CO₂ offset allowance under 25 Pa Code §§ 145.391—145.397 is contingent on meeting the requirements of 25 Pa Code §§ 145.391—145.397. The Project Sponsor authorizes the Department or its agent to audit this offset project for purposes of verifying that the offset project, including the Monitoring and Verification Plan, has been implemented as described in this application. The Project Sponsor understands that this right to audit shall include the right to enter the physical location of the offset project. The Project Sponsor submits to the legal jurisdiction of the Commonwealth of Pennsylvania.

| Project Sponsor signature | Date |
|---------------------------|--------|
| Printed name | |
| Title | |
| Organization | Notary |

| Offset Project Name | Offset Project ID Code | |
|---------------------|------------------------|--|
| | | |

Form 1.5 – Disclosure of Greenhouse Gas Emissions Data Reporting

| Check the box below that applies: | | | |
|---|--|--|--|
| No greenhouse gas emissions data related to the offset project referenced in this Consistency Application have been or will be reported to a voluntary or mandatory program other than the CO₂ Budget Trading Program. Greenhouse gas emissions data related to the offset project referenced in this Consistency Application have been or will be reported to a voluntary or mandatory program other than the CO₂ Budget Trading Program. Information for all such programs to which greenhouse gas emissions data have been or will be reported is provided below. | | | |
| Name of Program to which GHG Emissions Data Repor | rted | | |
| | | | |
| Check all that apply: Reporting is currently ongoing Reporting was conducted in the past Reporting will be conducted in the future Reporting is mandatory Reporting is voluntary | Enter Frequency of Reporting Enter Reporting Start Date | | |
| Program Contact Information – Address | Program Website | | |
| | | | |
| Categories of Emissions Data Reported | | | |
| | | | |
| Name of Program to which GHG Emissions Data Repor | rted | | |
| , | | | |
| Check all that apply: Reporting is currently ongoing Reporting was conducted in the past Reporting will be conducted in the future Reporting is mandatory Reporting is voluntary | Enter Frequency of Reporting Enter Reporting Start Date | | |
| Program Contact Information – Address | Program Website | | |
| | | | |
| Categories of Emissions Data Reported | | | |

Add extra pages as needed.

Part 2. Category-Specific Information and Documentation Forms

The three (3) forms in Part 2 of the *Consistency Application* address category-specific requirements and documentation for agricultural manure management offset projects. Instructions for the Part 2 forms are provided below.

Form 2.1 Project Description

Attach a detailed narrative of the actions to be taken by the offset project. The attached narrative must include a header that indicates it is an attachment to Form 2.1 and identifies the offset project name and offset project ID code. The narrative must include the following information:

1. Offset Project Owner and Operator Information. Provide organization legal name(s), point(s) of contact information, and physical address for the offset project owner and offset project operator. The owner of the offset project is the party that holds the legal rights to the offset project. The operator of the offset project is the legal entity responsible for operating, controlling, or supervising the offset project under a written agreement with the owner of the offset project.

Provide organization legal name(s), point(s) of contact information, and physical address for the parent company if the owner or operator is a subsidiary.

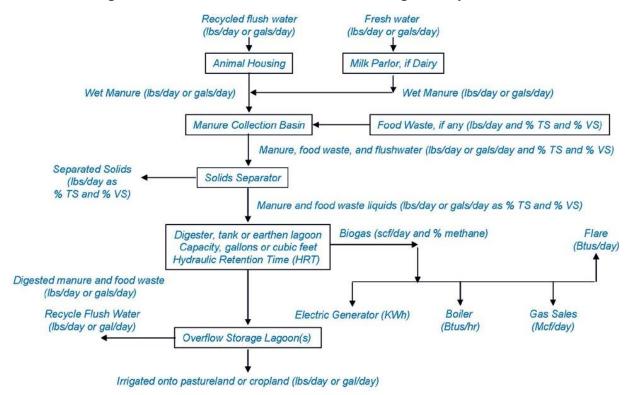
- 2. <u>Offset Project Facility Location and Specifications</u>. Provide the following information about the facility where the offset project occurs or will occur:
 - Name of the facility
 - Physical address (including city, state, zip code) of the facility
 - Organization legal name(s), address, and point(s) of contact information for the owner and operator of the facility; provide organization legal name(s), point(s) of contact information, and physical address for the parent company if the owner or operator of the facility is a subsidiary
 - Specifications of the facility where the offset project is or will be located, if not one of the listed facilities at number 3 below; if one of the facilities listed at number 3 below, identify the facility
- 3. <u>Influent Facility Location and Specifications</u>. Provide the following information in narrative or table form *for each facility* that will provide influent (manure and/or organic food waste) to the anaerobic digester¹:
 - Name of the facility
 - Physical address (including city, state, zip code) of the facility
 - Type(s) of manure and/or organic food waste influent from the facility to be added to the digester (for manure: dairy cow, swine, specify other; for food waste: dairy, vegetable, fruit, meat-processing, oil-based, or specify other)
 - Type(s) of manure and/or organic food waste storage practices used prior to offset project commencement (liquid/slurry, pit below animal confinements, uncovered anaerobic lagoons, or specify other), total capacity of such storage(volume in cubic feet or gallons), and length of

¹ If the information requested is included in a state or local permit, the information provided in the *Consistency Application* must be consistent with that included in the permit.

- storage time (days)
- Type of manure collection employed at the facility (mechanical scrape or flush)
- Estimated manure production in pounds per day for the facility, and the water used to clean milking parlors, barns, or other installations, in gallons per day
- Volume of manure and/or organic food waste influent, which includes water content, produced by the facility (gallons per day); specify whether the estimate is based on water meter measurements or derived from the daily volume change in manure storage and/or organic food waste storage at the facility, in gallons per day or cubic feet per day
- Volume of manure and/or organic food waste influent from the facility to be added to the anaerobic digester (gallons per day)
- 4. <u>Equipment Specifications and Project Schematic</u>. Provide the following information in narrative or table form (information should be identical to that from a state or local permit, if applicable):
 - a. Identify the type(s) of anaerobic digester installed or to be installed as part of the offset project:
 - Complete mix digester
 - Plug flow digester
 - Covered lagoon digester
 - Other digester type (specify)
 - b. For each anaerobic digester installed or to be installed as part of the offset project, provide the following information:
 - Name of manufacturer
 - Date of installation
 - Design capacity (in cubic feet or gallons)
 - Hydraulic retention time (HRT) in days (HRT = Volume of digester/average volume of manure added per day)
 - Digester biogas collection, flow, and composition monitoring equipment specifications including:
 - i. type(s) of equipment and manufacturer(s):
 - ii. dates of installation;
 - iii. dates of initial calibration;
 - iv. design digester biogas flow capacity (standard cubic feet per minute);
 - v. installed digester biogas flow meter accuracy;
 - vi. methane concentration instrument thresholds (percent by volume) and precision and accuracy levels as specified by the manufacturer; and
 - vii. whether methane concentration instrument provides for continuous or periodic monitoring of digester biogas.
 - c. For each anaerobic digester installed or to be installed as part of the offset project, provide the following information about how methane from the digester is utilized or will be utilized, as applicable:
 - Electricity Generation:

- i. Type of electric generation unit (internal combustion engine, microturbine, fuel cell, or specify other type);
- ii. Make or model, manufacturer, and date of installation of electric generation unit;
- iii. Design electricity generation capacity in MWe, as specified by the manufacturer; and
- iv. Heat rate (Btu/kWh), as specified by the manufacturer.
- On-Site Direct Combustion:
 - Type of combustion unit (flare, boiler, water heater, space heater, or specify other); and
 - ii. Make or model, manufacturer, and date of installation of combustion unit.
- d. Attach a technical schematic of the anaerobic digestion system that illustrates the manure flow from animal pens, food waste added (if any), collection system (whether scrape or flush), digester, gas handling system (generator, flare, boiler, or other gas utilization device), effluent storage for the digested manure, and ultimate disposal. Include mass flow of the manure, food waste, and water quantities on a daily basis. Include all mass and energy flows. Include manure and food waste flow for all facilities that will provide influent to the anaerobic digester. Figures 1 and 2 below provide illustrative examples.

Figure 1. Technical Schematic of Manure Digester System



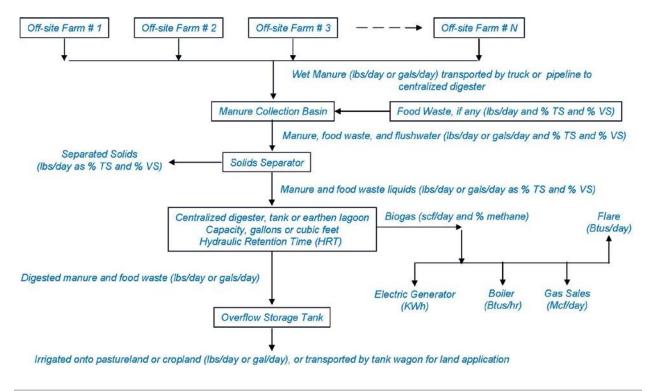


Figure 2. Technical Schematic of Centralized Digester System

Form 2.2 Demonstration of Eligibility

Attach documentation to Form 2.2 to demonstrate offset project eligibility. The attachment must include a header that indicates it is an attachment to Form 2.2 and includes the offset project name and offset project ID code. Attached documentation must include the following:

- Demonstration of Uncontrolled Anaerobic Storage. Provide documentation for each facility that will provide influent to the anaerobic digester that the manure and/or organic food waste that is input into the anaerobic digester would have been stored through uncontrolled anaerobic storage in the absence of the offset project. Provide the following documentation for each facility, as follows:
 - a. For a facility providing manure, provide the following:
 - A diagrammatic representation (system schematic) of the previous waste management system at the project site prior to offset project implementation.
 - Documentation that the manure was stored for at least 30 days and that the storage tank was not stirred for at least 30 days, using the following equation and historic data:
 - Storage time, days = Volume of the storage tank (gallons or cubic feet) /
 Average daily volume of manure input (gallons or cubic feet)
 - Documentation showing that the previous manure storage facility contained manure that had moisture content of at least 75%.

- b. For a facility providing organic food waste, provide the following:
 - A diagrammatic representation (system schematic) of the previous waste management system at the project site prior to offset project implementation
 - Documentation that the food waste was stored for at least 30 days and that the storage tank was not stirred for at least 30 days, using the following equation and historic data:

Storage time, days = Volume of the storage tank (gallons or cubic feet) /
Average daily volume of food waste (gallons or cubic feet)

- Documentation showing that the previous food waste storage facility contained food waste that had moisture content of at least 75%.
- Documentation of Digester System Feedstock. Provide documentation that at least 50-percent of the total annual mass input into the anaerobic digester(s) that comprises the offset project consists of livestock manure. List the annual mass of manure and organic food waste influent (in pounds) that will be provided to the digester from each facility documented in Form 2.1.
- 3. <u>Demonstration of Conditional Eligibility for Projects that Receive Certain Incentives or Retain Attribute Credits</u>. If the offset project meets certain criteria outlined in this section, it may be eligible for the award of CO₂ offset allowances even if the following conditions apply:
 - The offset project received or will receive funding or other incentives from the CO₂ Budget Trading Program auction proceeds.
 - The offset project contains an electric generation component and the Project Sponsor retains the legal rights to any and all attribute credits generated by the offset project that may be used for compliance with a renewable portfolio standard (RPS) or other regulatory requirement.

If either or both of the above conditions apply, attach documentation to Form 2.2 that demonstrates the offset project meets *at least one* of the following criteria:

- The market penetration rate for anaerobic digester systems in the Commonwealth of Pennsylvania is five (5)percent or less;
- The offset project is located at a farm with 4,000 or less head of dairy cows or equivalent animal units; or
- The offset project is a regional-type digester designed for annual manure input equivalent to that which would be produced by a farm with 4,000 or less head of dairy cows or equivalent animal units.

Attached documentation must include at least one of the following:

a. <u>Market Penetration Rate</u>. Provide documentation that the market penetration rate for anaerobic digesters in the Commonwealth of Pennsylvania is five (5) percent or less. The market penetration rate determination must utilize the most recent market data availableat the time of submission of the *Consistency Application*. The documentation must use the following formula:

MP (%) =
$$(MG_{AD}/MG_{STATE}) \times 100$$

where:

MG_{AD} = average annual manure generation from dairy cows and swine serving all anaerobic digester projects in the Commonwealth of Pennsylvania (in lbs of manureper year) when the Consistency Application is submitted

MG_{STATE} = average annual manure generation of all dairy cows and swine in the Commonwealth of Pennsylvania (in lbs of manure per year) when the *Consistency Application* is submitted

To determine the average annual manure generation, MG_{AD}, serving anaerobic digesters in the Commonwealth of Pennsylvania, contact the Pennsylvania Department of Agriculture for information on the population of dairy cows and swine that currently serve anaerobic digesterprojects in the Commonwealth of Pennsylvania. If such information is unavailable, obtain state and/or local digester project permits, which may provide information on the manure supply and/or dairy cow and swine population serving anaerobic digesters.

If the above resources do not provide information for manure generation serving anaerobic digester projects in the Commonwealth of Pennsylvania, use data of operational anaerobic digesterprojects available from the U.S. EPA AgStar Program to derive manure generation estimates for anaerobic digesters in the Commonwealth of Pennsylvania (see http://www.epa.gov/agstar/operational.html).

If the U.S. EPA AgStar 2 data indicate the Commonwealth of Pennsylvania has no operational anaerobic digesters, MG_{AD} equals zero and the market penetration criterion is met.

If the U.S. EPA AgStar data indicate operational anaerobic digesters in the Commonwealth of Pennsylvania that serve a flare or other non-electric generation use, derive an estimate of manure generated annually by the animals providing influent to the anaerobic digester using Table 1 below and U.S. EPA AgStar data of the number of animals and animal type serving the anaerobic digester.

If the U.S. EPA AgStar data indicate operational anaerobic digesters in the Commonwealth of Pennsylvania that serve an electric generator, estimate the quantity of manure influent associated with anaerobic digester projects in the Commonwealth of Pennsylvania using the following equation:

MG_{AD} (lbs of manure per year) = [Electricity production (kWh/yr) x Generator heat rate (Btu/kWh)/Methane heat content (Btu/scf methane)] / methane potential from manure (scf methane/lb manure)

where:

Generator heat rate

= 14,000 Btu/kWh, used by AgStar for typical digester gas fueled engine-generators

4040 Dt / f tl

Methane heat content

= 1012 Btu/scf methane

Methane potential from manure = 0.5 scf of methane per lb wet manure, a

typical value for digester conversion of manure to methane according to AgStar².

² EPA, *AgStar Handbook, Appendix C, FarmWare User's Manual Version 3.0,* available at http://www.epa.gov/agstar/pdf/handbook/appendixc.pdf.

To determine the average annual population of dairy cows and swine in the Commonwealth of Pennsylvania, use the most current National Agricultural Statistics Service USDA Census of Agriculture

Calculate the average annual manure generation of all dairy cows and swine in the Commonwealth of Pennsylvania, MG_{STATE}, using Table 1 below and the following equation:

MG_{STATE} = Population of dairy cows and swine x Pounds of manure per day per animal x 365 days/yr

Table 1. Default Manure Excretion Rate

| Type of | | Manure [♭] |
|----------------|---------------------------|----------------------|
| Animal | Weight ^a (lbs) | Lbs/d/1000 lb weight |
| <u>Dairy</u> | | |
| Lactating Cow | 1,332 | 80 |
| Dry Cow | 1,332 | 82 |
| Heifer | 1,049 | 85 |
| Calf | 260 | 65.8 |
| <u>Swine</u> | | |
| Sow: Lactating | 436 | 60 |
| Sow: Gestating | 436 | 27.2 |
| Nursing Pigs | 35 | 106 |
| Weaned Pigs | 90 | 106 |
| Feeder Pigs | 201 | 63.4 |
| Boars | 400 | 20.5 |

^a Average estimated weights from U.S. EPA, U.S. Manure Management Inventory, 2004.

Source: U.S. EPA, *AgStar Handbook*, *Appendix C, FarmWare User's Manual Version* 3.0, 2007, http://www.epa.gov/agstar/resources/handbook.html.

Calculate the market penetration rate (MP) in percent as described in the equation above. Demonstrate that the market penetration rate is no more than five (5) percent.

- b. <u>Size of Farm</u>. Provide documentation that the offset project is located at a farm with 4,000 or less head of dairy cows or equivalent animal units. Use the following procedures:
 - i. For an offset project located on a farm that includes only dairy cows, tabulate the number of dairy cows on the farm to determine the head of dairy cows.
 - ii. For an offset project located on a farm that includes dairy cows and/or other animal types, tabulate the number of dairy cows on the farm to determine the number of cow animal units, and determine the number of equivalent animal units of the other animal types as follows:
 - (A) Tabulate the total weight for each animal type other than dairy cows on the farm (in pounds).
 - (B) Divide the total weight for each animal type (lbs) by 1,400 lbs to derive the number of equivalent animal units for that animal type.
 - (C) Sum the number of animal units for each animal type.

The result must demonstrate that 4,000 or less animal units are present on the farm.

^b USDA National Resource Conservation Service, Manure Production Nutrient Content Data (as excreted).

- c. <u>Input Capacity of Regional-Type Digester</u>. If the offset project is a regional-type digester, document that the total annual manure input supplied to the digester is designed to be less than the average annual manure produced by a farm with 4,000 or less head of dairy cows, or a farm with equivalent animal units. Providethe following:
 - i. Document the annual input capacity of the anaerobic digester in pounds of manure per year.
 - ii. Document the type of manure influent that will be provided to the anaerobic digester from each of the facilities supplying manure to the digester and the mass of such manure (lbs). (This information should be consistent with that provided in Form 2.1.)
 - iii. Document the number of dairy cows or equivalent animal units required to produce the annual mass of manure that meets the annual influent capacity of the anaerobic digester. For animals other than dairy cows, divide the average animal weight (lbs) by 1,400 lbs to determine equivalent animal units (1,400 lbs is the assumed default weight for a full-sized dairy cow). Document the data source used to estimate animal manure generation by animal type. (U.S. EPA, *AgStar Handbook, Appendix C, FarmWare User's Manual Version 3.0*, 2007, is one source of such data.)

The total must be 4,000 or less dairy cows or equivalent animal units.

Form 2.3 Monitoring and Verification Plan

Provide the Monitoring and Verification Plan (M&V Plan) as an attachment to Form 2.3. The attachment must include a header that indicates it is an attachment to Form 2.3 and includes the offset project name and offset project ID code. The attached M&V Plan must include the following information:

- Documentation of Methane Generation Calculation Procedures. Attach a
 spreadsheet documenting the equations and project-specific data sources for each
 influent-generating facility that will be used to calculate the monthly baseline
 methane emissions from the degradation of volatile solids during the annual
 reporting period, including the following:
 - Baseline emissions (short tons CO₂-equivalent)
 - Volatile solids degraded
 - Calculation of van't Hoff-Arrhenius factor ("f factor")
 - Calculation of volatile solids available for degradation
 - Calculation of mass of volatile solids available at the start of each reporting month
 - Calculation of mass of volatile solids available at the end of each reporting month
 - Calculation of mass of volatile solids removed from storage during each reporting month
 - Calculation of volume of methane produced

The equations used must be consistent with those specified at 25 Pa. Code § 145.395(c) (See also, *Monitoring and Verification Report*, Form 2.3). The documentation of data sources must account for how facility-specific data obtained through the influent monitoring procedures specified under item number 2 below will be applied in the methane generation equations.

- 2. <u>Influent Monitoring Procedures</u>. Document the monitoring procedures to be used at each facility providing manure and/or organic food waste influent to the anaerobic digester, including the following:
 - Monthly influent flow (in kg, wet weight) from the facility into the digester, based on either recorded weight or derived from digester influent pump flow. Provide specified quantification procedures.
 - Monthly influent total solids concentration as a percent of a sample, using U.S. EPA Method Number 160.3, Methods for the Chemical Analysis of Water and Wastes (MCAWW) (EPA/600/4-79/020). Provide specified sampling procedures and method and the testing facility to be used.
 - Monthly influent volatile solids concentration as a percent of total solids in a sample, using U.S. EPA Method Number 160.4, Methods for the Chemical Analysis of Water and Wastes (MCAWW) (EPA/600/4-79/020). Provide specified sampling procedures and method and the testing facility to be used.
 - Monthly average ambient temperature (degrees Celsius) based on reading from the nearest National Weather Service certified weather station. Provide the procedures for collecting temperature data, the location of the closest certified weather station, and the distance from the influent-generating facility.
- 3. <u>Documentation of Methane Captured and Destroyed</u>. Attach a spreadsheet documenting the calculations and project-specific data sources that will be used to quantify the annual volume of methane (in standard cubic feet) captured and destroyed by the anaerobic digester during the reporting period, including the following:
 - a. If a direct continuous monitoring system is measuring methane concentration of digester biogas:
 - Daily methane recovery as measured in standard cubic feet of methane per day from the continuous monitoring system
 - Sum of daily methane recovery on a monthly basis
 - Sum of monthly methane recovery to obtain total annual methane recovery from the digester
 - b. If a direct continuous monitoring system is monitoring digester biogas flow only:
 - Daily digester biogas flow as measured in standard cubic feet of digester biogas from the continuous monitoring system
 - Sum of daily digester biogas flow on a weekly basis
 - Weekly methane concentration measurements (in percent by volume) using calibrated digester biogas analyzer
 - Weekly methane recovery as measured in standard cubic feet, derived by multiplying weekly digester biogas flow by the respective week's methane concentration measurement (in percent by volume)
 - Sum of weekly methane recovery on a monthly basis
 - Sum of monthly methane recovery to obtain total annual methane recovery from the digester in standard cubic feet of methane
- 4. <u>Documentation of Transport CO₂ Emissions (applicable only to regional-type digesters)</u>. If the offset project is a regional-type digester, attach a spreadsheet documenting the procedures to be used to quantify CO₂ emissions due to transportation of manure and organic food waste from the facilities where the

manureand organic food waste were generated to the anaerobic digester during the reporting period. Specify data sources and calculations for one of the following two methods:

a. Method 1: Emission factors for type and quantity of fuel used

Identify data sources and calculations for fuel use for all shipments of manure and organic food waste from off-site facilities to the anaerobic digester during each reporting year. Specify how transport miles and quantity of fuel used for each shipment will be determined and recorded. Specify the emission factors to be used, which may include:

Diesel fuel: 22.912 lbs CO₂/gallon
Gasoline: 19.878 lbs CO₂/gallon

Other fuel: emission factor approved by the Department

b. Method 2: Emission factors for type of fuel by ton-mile

Identify data sources and calculations to determine total tons of manure and organic food waste transported from off-site facilities for input into the anaerobic digester during each reporting period. Specify how transport tons, transport miles, and fuel type used for each shipment will be determined and recorded. Specify the emission factors to be used, which may include:

• Diesel fuel: 0.131 lbs CO₂ per ton-mile

• Gasoline: 0.133 lbs CO₂ per ton-mile

• Other fuel: emission factor approved by the Department

- 5. <u>Quality Assurance/Quality Control (QA/QC) Procedures</u>. Document the QA/QC procedures for equipment used to measure biogas volumetric flow and methane concentration, including the following:
 - Procedures for recording names and contact information for the personnel responsible for project monitoring and documentation, including manure and organic food waste influent monitoring, recording of digester biogas flow and methane concentration, and identification of third-party analytical laboratories used to verify biogas methane composition
 - Procedures for recording names and contact information for the personnel responsible for QA/QC of project monitoring data and documentation
 - Procedures, if applicable, for annual comparison of methane generated by the anaerobic digester, as measured by monitoring equipment, against estimated methane used to generate electricity, as derived from electric generation records. The recommended procedure for the estimation of methane used to generate electricity is as follows:

Annual methane recovered (scf) = [(annual kWh of electricity produced from digester biogas methane) x (heat rate in Btu/kWh of electric generation unit)] / 1012 Btu/scf

- Procedures, if applicable, for documenting annual electricity generation and electric generation unit heat rate
- Procedures for documenting installation and retirement of equipment for monitoring biogas volumetric flow and methane concentration

- Procedures and calculations for standardization of digester biogas flow that correct for documented site-specific temperature and pressure measurements. (This procedure is not necessary when using flow meters that automatically measure temperature and pressure, and express digester biogas flow in standard cubic feet.)
- Procedures for QA/QC of methane concentration measurements. If using gas analyzer instruments inside the digester or in the biogas collection pipe for continuous methane concentration measurement, procedures for maintenance of the following data:
 - i. Accuracy and precision of analyzer, in accordance with manufacturer specifications;
 - ii. Proof of initial calibration (documentation provided by manufacturer);
 - iii. Records of periodic instrument calibration in accordance with manufacturer instructions:
 - iv. Records of methane concentration in at least 15-minute intervals; and
 - v. Records of calibration procedure followed at least once per year against a gas sample with a known methane concentration in the range of 60 to 70 percent by volume.
- Procedures for quarterly third-party laboratory analysis of methane concentration of sampled biogas using U.S. EPA-approved laboratory testing methods, including specification of the testing method to be used
- Procedures for ensuring that biogas samples will be taken at the location of the digester biogas flow meter
- Procedures for QA/QC of influent monitoring data for each facility supplying manure and/or organic food waste to the anaerobic digester
- For regional-type digesters, procedures for the compilation of monthly receipts and records of manure and/or organic food waste (in kg) received for input into the anaerobic digester from each facility supplying manure and/or organic food waste influent
- For regional-type digesters, for each facility supplying organic food waste influent, procedures for ensuring that the daily food waste input to the on-site storage tank prior to shipment to the anaerobic digester is greater than 1/30 of the total storage tank capacity
- For regional-type digesters, for each facility supplying manure influent, procedures for ensuring that the daily manure input to the on-site storage tank or pond prior to shipment to the anaerobic digester is greater than 1/30 of the total storage tank or pond capacity
- Procedures for the compilation of an annual QA/QC report summarizing findings of QA/QC activities conducted and any remedial actions taken
- 6. <u>Documentation of Measuring and Monitoring Equipment Maintenance, Operation, and Calibration</u>. Document the record keeping protocol that will be used to ensure that the following required actions are performed and documented for each reporting period:
 - a. Maintenance of Measuring and Monitoring Equipment.

- Monthly records of digester biogas flow rate performance tests to ensure:

 (1) flow readings are being recorded at least every 15 minutes;
 (2) the accuracy of digester biogas flow meter readings is within +/- 5 percent of manufacturer specifications;
 (3) methane concentration instrument manufacturer specifications for precision and accuracy are met
- Records of the type of biogas flow meter installed (differential pressure or hot wire anemometer)
- Records of the date and location of flow meter installation
- Records of performance of maintenance schedules for digester biogas flow meter and methane concentration instrument in accordance with manufacturer recommendations and specifications

b. Operation of Measuring and Monitoring Equipment.

- Daily records of collected digester biogas flow rates in at least 15-minute intervals
- Weekly records of methane concentration (if methane concentration is not continuously monitored) or daily records of methane concentration (if onsite continuous methane concentration analyzer is used)
- Monthly records of calculation of digester biogas flow rate standardization (in standard cubic feet per day) to correct for site-specific pressure and temperature measurements. (Note, this procedure is not necessary when using flow meters that automatically measure temperature and pressure, and express digester biogas gas flow in standard cubic feet.)
- Daily records of field data used for flow measurement standardization, including barometric pressure and biogas temperature and pressure measurements. (Note, this is not applicable when using flow meters that automatically measure temperature and pressure, and express digester biogas gas flow in standard cubic feet.)
- Monthly records of the number of hours the digester biogas flow meter device was inoperable
- Monthly records of the amount of methane combusted (in standard cubic feet) in the combustion device
- Monthly records of electricity generation and measured heat rate, based on source tests or derived from heat input (MMBtu) and electricity generation (KWh) (applicable to offset projects with an electric generation component)

c. Calibration of Measuring and Monitoring Equipment.

- Records of the calibration procedures conducted for the digester biogas flow meter in accordance with manufacturer specifications, but conducted not less than annually
- Records of the dates and results of digester biogas flow meter calibration, and the portable instrument and procedures used to check installed flow meter accuracy, including field measurements and flow calculations
- Records of the calibration procedures conducted for the methane concentration monitoring instrument. (Daily records if applicable to continuous methane concentration monitoring instrument; monthly records if applicable to portable methane concentration monitoring instrument.)
- Records of the dates and results of methane concentration monitoring instrument calibration, including field measurement data. (Applicable to both

continuous methane concentration monitoring instrument and portable methane concentration monitoring instrument.)

7. Record Keeping and Records Retention Protocol. Document the record keeping and records retention protocol that will be used to maintain documentation throughout the duration of the offset project, including maintenance of an electronic index or hardcopy of information.

Document the record keeping protocol that will be used to ensure that the following documentation for each reporting year is maintained:

a. Influent Monitoring.

For each facility providing manure and/or organic food waste influent to the digester:

- Records of monthly influent flow (in kg, wet weight) into the digester and quantification procedures used
- Records of monthly influent total solids concentration as a percent of total solids in sample, and sampling procedures, method, and testing facility used
- Records of monthly influent volatile solids concentration as percent of total solids in sample, and sampling procedures, method, and testing facility used
- Records of average monthly ambient temperature, and data collection method used

b. Methane Captured and Destroyed.

If a direct continuous monitoring system is measuring methane concentration of recovered digester biogas:

 Records of daily methane recovery as measured in standard cubic feet from the continuous monitoring system

If a direct continuous monitoring system is measuring the flow of digester biogas only:

- Records of daily digester biogas flow as measured in standard cubic feet of digester biogas from the continuous monitoring system
- Records of weekly methane concentration measurements (in percent by volume) using a calibrated digester biogas analyzer

c. Transport CO₂ Emissions.

If Method 1 (see item 4.a. above) is used to document transport CO₂ emissions:

 Records of transport miles and quantity of fuel used for each shipment of manure or organic food waste from an off-site facility for input into the digester

If Method 2 (see item 4.b. above) is used to document transport CO₂ emissions:

 Records of tons of manure or organic food waste transported, transport miles, and fuel type used for each shipment of manure or organic food waste from an off-site facility for input into the digester

d. Quality Assurance/Quality Control (QA/QC) Program.

- Names and contact information for the personnel responsible for project monitoring and documentation
- Names and contact information for personnel responsible for QA/QC of

- project monitoring and documentation
- Annual QA/QC report and the associated findings and remedial actions taken
- Annual comparison of methane generated by the anaerobic digester, as measured by monitoring equipment, with estimated methane used to generate electricity, as derived from electric generation records (applicable to offset projects with an electric generation component)
- Annual electricity generation and electric generation heat rate (applicable to offset projects with an electric generation component)
- Records of installation and retirement of equipment for monitoring biogas volumetric flow and methane concentration
- Records of monthly calculation results for standardizing digester biogas flow
 that correct for documented site-specific temperature and pressure
 measurements. (Note, not applicable when using flow meters that
 automatically measure temperature and pressure, and express digester
 biogas flow in standard cubic feet.) Includes daily records of field data
 collected for flow measurement standardization, including barometric
 pressure and biogas temperature and pressure measurements
- Results of quarterly third-party laboratory analysis of methane concentration of sampled biogas using U.S. EPA-approved laboratory testing methods
- Documentation that biogas samples were taken at the location of the digester biogas flow meter
- For regional-type digesters, monthly receipts and records of manure and organic food waste (in kg, wet weight) received for input into the anaerobic digester from each off-site facility supplying manure and/or organic food waste influent
- For regional-type digesters, monitoring records of daily organic food waste input to storage at each off-site facility supplying manure and/or organic food waste influent (in mass or volume, and as a fraction of total tank storage capacity)

e. Maintenance of Measuring and Monitoring Equipment.

- Records of digester biogas flow meter performance test results for each month
- Records of the type of biogas flow meter installed during the reporting period (differential pressure or hot wire anemometer)
- Records of the date and location of flow meter installation
- Records of maintenance performed on digester biogas flow meter and methane concentration instrument

f. Operation of Measuring and Monitoring Equipment.

- Records of daily digester biogas flow rates (with flow rate recorded at least every 15 minutes)
- Records of weekly methane concentration (if methane concentration not continuously monitored) or records of daily methane concentration (if direct continuous methane concentration analyzer is used)
- Records of number of hours digester biogas flow meter device was inoperable each month
- Records of combustion device operation hours for each month

- Records of the daily amount of biogas combusted in at least 15minuteintervals
- g. Calibration of Measuring and Monitoring Equipment.
 - Records of digester biogas flow meter calibration results, and the portable instrument and procedures used to check installed flow meter accuracy, including field measurements and flow calculations

| Offset Project Name | Offset Project ID Code |
|---------------------|------------------------|
| | |

Form 2.1 - Project Description

Attach a detailed narrative of the actions to be taken by the offset project. The attached narrative must include a header that indicates it is an attachment to Form 2.1 and includes the offset project name and offset project ID code.

Check the boxes below to indicate that the following required information is included in the attached detailed project narrative:
1. Offset project owner and operator information
2. Offset project location and specifications
3. Influent facility location and specifications (for all facilities providing influent to the anaerobic digester)
4. Equipment specifications and project schematic

| Offset Project Name | Offset Project ID Code |
|---------------------|------------------------|
| | |
| | |

Form 2.2 – Demonstration of Eligibility

demonstrate offset project eligibility. Each attachment must include a

| nea | ach documentation to demonstrate onset project engibility. Each attachment must include a ader that indicates it is an attachment to Form 2.2 and includes the offset project name and set project ID code. |
|-----|---|
| ٩. | Demonstration of Eligibility (applicable to all offset projects) |
| Ch | eck the boxes below to indicate that the following required documentation is attached: |
| | Demonstration of uncontrolled anaerobic storage (for each facility providing influent to the anaerobic digester) |
| | 2. Documentation of digester system feedstock (documentation that at least 50-percent of the total annual mass input into the anaerobic digester consists of livestock manure) |
| 3. | Demonstration of Conditional Eligibility (applicable to certain offset projects) |
| | he offset project meets certain specifications, it may be eligible for the award of CO ₂ offset owances even if the following apply: |

The offset project received or will receive funding or other incentives from the CO2 Budget Trading Program auction proceeds. The offset project includes an electric generation component and the Project Sponsor or project sponsor organization retains the legal rights to any and all attribute credits generated by the offset project that may be used for compliance with a renewable portfolio standard (RPS) or other regulatory requirement.

Check one or more of the boxes below, as appropriate, to indicate that the following documentation is attached to demonstrate conditional eligibility: 1. The market penetration rate for anaerobic digesters in the Commonwealth of Pennsylvania is five (5) percent or less 2. The offset project is located at a farm with 4,000 or less head of dairy cows or equivalent 3. The offset project is a regional-type digester designed for annual manure input less than would be produced by a farm with 4,000 or less head of dairy cows or equivalent animal units

| Offset Project Name | Offset Project ID Code |
|---------------------|------------------------|
| | |

Form 2.3 – Monitoring and Verification Plan

Provide the Monitoring and Verification Plan (M&V Plan) as an attachment. The attachment

must include a header that indicates it is an attachment to Form 2.3 and includes the offset project name and offset project ID code. Check the boxes below to indicate that the M&V Plan includes the following required information: 1. Documentation of Methane Generation Calculation Procedures. Spreadsheet documenting equations and project-specific data sources for each influent-generating facility that will be used to calculate monthly baseline methane emissions 2. Influent Monitoring Procedures. Documentation of monitoring procedures to be used at each facility supplying manure and/or organic food waste influent to the anaerobic digester 3. Documentation of Methane Captured and Destroyed. Spreadsheet documenting calculations and project-specific data sources that will be used to quantify annual volume of methane captured and destroyed by the anaerobic digester 4. Documentation of Transport CO₂ Emissions (only applicable to regional-type digesters). Spreadsheet documenting procedures to be used to quantify CO₂ emissions due to transportation of manure and organic food waste from facilities where the manure and organic food waste were generated to the anaerobic digester 5. Quality Assurance/Quality Control (QA/QC) Procedures. Documentation of QA/QC procedures for equipment to be used to measure biogas volumetric flow and methane concentration 6. Documentation of Measuring and Monitoring Equipment Maintenance, Operation, and Calibration. Documentation of record keeping protocol that will be used to ensure that required actions are performed and documented 7. Record Keeping and Records Retention Protocol. Documentation of record keeping

and records retention protocol that will be used to maintain documentation throughout the duration of the offset project

Part 3. Independent Verification Form

The form in Part 3 of the *Consistency Application* addresses requirements and documentation related to the independent verifier certification statement and report. Instructions for the form in Part 3 are provided below.

Form 3.1 Independent Verifier Certification Statement and Report

An accredited verifier must sign and date the form. Submit the originally signed form as part of the paper hardcopy of the *Consistency Application*. Scan the signed and dated form for submission as part of the electronic version of the *Consistency Application*.

Provide the independent verifier report as an attachment to Form 3.1. The verifier report must include a header that indicates it is an attachment to Form 3.1 and includes the offset project name and offset project ID code.

The verifier report must document the following:

- The verifier has reviewed the entire Consistency Application and evaluated the contents of the application in relation to the applicable requirements of 25 Pa Code §§ 145.391—145.397.
- 2. The verifier has evaluated the adequacy and validity of information supplied by the Project Sponsor to demonstrate that the offset project meets the applicable eligibility requirements of 25 Pa Code § 145.393, § 145.394 and § 145.395.
- 3. The verifier has evaluated the adequacy and validity of information supplied by the Project Sponsor to demonstrate baseline emissions pursuant to the applicable requirements of 25 Pa. Code § 145.395.
- 4. The verifier has evaluated the adequacy of the Monitoring and Verification Plan submitted pursuant to 25 Pa. Code § 145.395.

The verifier report must include the following contents, in the order listed below:

- Cover page with report title and date
- Table of contents
- List of acronyms and abbreviations
- Executive summary
- Description of objective of report
- Identification of the client, including name, address, and other contact information
- Identification of the offset project
- Description of evaluation criteria (applicable regulatory provisions and documentation required in the *Consistency Application*)
- Description of the review and evaluation process, including any site visits and interviews
- Identification of individuals performing the verification work, including the verification team leader and key personnel, and contact information for the team leader

Offset Application- Avoided Methane Emissions from Agricultural Manure Management

- Description of the materials provided to the verifier by the Project Sponsor
- Evaluation conclusions and findings, including level of assurance provided

| Offset Project Name | Offset Project ID Code |
|-----------------------------------|------------------------------------|
| | |
| Form 3.1 – Independent Verifier (| Certification Statement and Report |

An accredited verifier must sign and date the form. Attach the accredited verifier report. The attached verifier report must include a header that indicates it is an attachment to Form 3.1 and includes the offset project name and offset project ID code.

| Name of Accredited Independent Verifier | |
|---|--|
| | |

I certify that the accredited independent verifier identified above reviewed the *Consistency Application*, including all forms and attachments, in its entirety, including a review of the following:

- (a) The adequacy and validity of information supplied by the Project Sponsor to demonstrate that the offset project meets the applicable eligibility requirements of 25 Pa Code § 145.393, § 145.394 and § 145.395, including the required documentation that must be provided in the *Consistency Application*.
- (b) The adequacy and validity of information supplied by the Project Sponsor to demonstrate baseline emissions, pursuant to the applicable requirements of 25 Pa. Code § 145.395, including the required documentation that must be provided in the *Consistency Application*.
- (c) The adequacy of the Monitoring and Verification Plan in accordance with the applicable requirements of 25 Pa. Code § 145.395 including the required documentation that must be provided in the *Consistency Application*.

A verification report is attached that documents the verifier's review of the items listed above and includes evaluation conclusions and findings.

| Verifier Representative Signature | Date |
|-----------------------------------|--------|
| Printed name | |
| Title | |
| | Notary |



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Pennsylvania CO₂ Budget Trading Program

Offset Project Consistency Application

U.S. Forest Projects - Reforestation

Contents

| 1. | Overview | |
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| | Part 3 Independent Verification Form | |

1. Overview

To demonstrate that a U.S. Forest offset project qualifies for the award of CO₂ offset allowances, a Project Sponsor must submit to the Department in accordance with these instructions, a fully completed *Offset Project Consistency Application – U.S. Forest Project* ("Consistency Application"), including the coversheet and all forms and related attachments. An incomplete Consistency Application will not be reviewed to determine consistency. Following these instructions will ensure that the Consistency Application contains all necessary information and is submitted properly.

Each Project Sponsor should review the CO_2 Budget Trading Program regulations at 25 Pa Code §§ 145.394 —145.397addressing offset projects and the award of CO_2 offset allowances. All offset application materials and other documents are available at www.dep.pa.gov/RGGI.

Before the Consistency Application can be completed, the Project Sponsor must establish a general account and obtain an offset project ID code through the RGGI CO₂ Allowance Tracking System (RGGI COATS). The Project Sponsor identified in the Consistency Application must be the same as the Authorized Account Representative for the RGGI COATS general account identified in the Consistency Application. For information about establishing a RGGI COATS general account and offset project ID code, consult the RGGI COATS User's Guide, available at http://www.rggi-coats.org.

Key eligibility conditions and application submittal requirements for offset projects are as follows:

- U.S. Forest Projects may be applied for in a RGGI participating state (excluding NY and CT) or anywhere in the United States if Project State has entered into a Memorandum of Understanding with RGGI states.
- The Consistency Application must be submitted within one year after the project is commenced.

2. Submission Instructions

Submit one (1) complete hardcopy original *Consistency Application* as well as an electronic copy in the form of a CD disk to the Department at the location specified below. Submit hardcopies of forms requiring signatures as originally-signed copies and scan such signed forms for electronic submission. Facsimiles of the *Consistency Application* are not acceptable under any circumstances.

Pennsylvania Department of Environmental Protection c/o Bureau of Air Quality
Rachel Carson State Office Building, P.O. Box 8468
Harrisburg, PA 17105-8468

The Consistency Application has three parts, as described below. Each part comprises specified forms and required documentation. The Consistency Application has been created as a Microsoft Word document with editable fields. Enter information directly into the fields provided or submit information or documentation as an attachment, as directed. Include headers on all attachments indicating the form to which each is attached, the offset project name, and offset project ID code.

The Project Sponsor should save an electronic copy for his or her file to serve as a reference for any necessary remediation.

3. Consistency Application Forms

The Consistency Application includes eleven (11) forms divided into three parts, as follows.

Part 1. General Information Forms

- Form 1.1 Coversheet
- Form 1.2 General Information
- Form 1.3 Attestations
- Form 1.4 Project Sponsor Agreement
- Form 1.5 Disclosure of Greenhouse Gas Emissions Data Reporting

Part 2. Category-Specific Information and Documentation Forms

- Form 2.1 Project Description
- Form 2.2 Demonstration of Eligibility
- Form 2.3 Baseline Modeling
- Form 2.4 Monitoring and Verification Plan
- Form 2.5 Reversal Risk Rating

Part 3. Independent Verification Form

• Form 3.1 – Independent Verifier Certification Statement and Report

The following instructions address each of the forms in numerical order. Note that the forms themselves include many embedded instructions.

Part 1. General Information Forms

The five (5) forms in Part 1 of the *Consistency Application* address general requirements applicable to U.S. Forest – Reforestation offset projects. Instructions for the Part 1 forms are provided below.

Form 1.1 Coversheet

Enter the requested information in the editable text fields in the form.

Check the boxes to indicate which forms are being submitted. For information about entering the Project Sponsor, offset project name and offset project ID code, and RGGI COATS account name and number, see instructions below for Form 1.2, General Information.

Submit all required forms including the Coversheet. If a required form is not submitted, the *Consistency Application* will not be considered complete for commencement of review by the Department.

Form 1.2 General Information

Enter the requested information in the editable text fields in the form. If a text field is not applicable or is unanswerable, enter "NA." Note the following:

Offset Project ID Code: Enter the offset project ID code. The offset project ID code is the alphanumeric code generated when the Project Sponsor creates a record of the offset project in the RGGI CO₂ Allowance Tracking System (RGGI COATS). See the RGGI COATS User's Guide for more information about creating an offset project record in RGGI COATS, available at http://www.rggi-coats.org.

<u>Project Information</u>: Enter project information. The name of the offset project should be the same name entered by the Project Sponsor when creating a project record in RGGI COATS. The project location entered should be the primary location of the project if the project consists of actions at multiple locations. The summary narrative of the project should indicate all locations where project actions occur or will occur.

<u>Project Sponsor</u>: Identify the Project Sponsor and provide his or her contact information. The Project Sponsor is the natural person who is the Authorized Account Representative for the RGGI COATS general account identified in the *Consistency Application*. The Project Sponsor must be a Forest Owner as defined in Section 2.2 of the RGGI U.S. Forest Protocol.

<u>Project Sponsor Organization</u>: Provide the full legal name of the organization the Project Sponsor represents, including any alternative names under which the organization also may be doing business (e.g., John Doe Enterprises, Inc., d/b/a

JDE). If the Project Sponsor is representing himself or herself as an individual, enter "NA".

RGGI COATS General Account Name and Number: Enter the RGGI COATS general account name and number. The RGGI COATS general account identified in the *Consistency Application* is the RGGI COATS account into which any awarded CO₂ offset allowances related to the offset project will be transferred.

Form 1.3 Attestations

Sign and date the form. Submit the originally signed form as part of the paper hardcopy *Consistency Application*. Scan the signed and dated form for submission as part of the electronic version of the *Consistency Application*.

Form 1.4 Project Sponsor Agreement

Sign and date the form. Submit the originally signed form as part of the paper hardcopy *Consistency Application*. Scan the signed and dated form for submission as part of the electronic version of the *Consistency Application*.

Form 1.5 Disclosure of Greenhouse Gas Emissions Data Reporting

Check the appropriate box in the form to indicate whether greenhouse gas emissions data related to the offset project have been or will be reported to any voluntary or mandatory programs, other than the CO₂ Budget Trading Program. For each program for which data have been or will be reported, provide the program name, the program type (voluntary or mandatory), program contact information (website or street address), the categories of emissions data reported, the frequency of reporting, when the reporting began or will begin, and reporting status (prior, current, future). The Project Sponsor must disclose future reporting related to current commitments made to voluntary programs as well as future reporting mandated by current statutes, regulations, or judicial or administrative orders.

| Offset Project Name | Offset Project ID Code |
|---------------------|------------------------|
| | |

Form 1.1 – Coversheet

| Project Sponsor |
|--|
| Project Sponsor Organization |
| - rejest epenes: e.g |
| RGGI COATS General Account Name |
| RGGI COATS General Account Number |
| Each of the following forms (except Form 2.5, which is optional) must be submitted. Check the boxes below to indicate that the submitted <i>Consistency Application</i> includes each of the required forms: |
| ☐ Form 1.2 – General Information |
| Form 1.3 – Attestations |
| ☐ Form 1.4 – Project Sponsor Agreement |
| ☐ Form 1.5 – Disclosure of Greenhouse Gas Emissions Data Reporting |
| Form 2.1 – Project Description |
| Form 2.2 – Demonstration of Eligibility |
| Form 2.3 – Baseline Modeling |
| Form 2.4 – Monitoring and Verification Plan |
| ☐ Form 2.5 – Reversal Risk Rating |
| Form 3.1 – Independent Verifier Certification Statement and Report |

| Offset Project Name | Offset Project ID Code |
|---|------------------------------------|
| Form 1.2 – Gen | eral Information |
| Project Sponsor (RGGI COATS Authorized Account Re | epresentative) |
| Telephone Number Fax Number | Email Address |
| | |
| Street Address | |
| City State/Province | Postal Code Country |
| City State/Province | Postal Code Country |
| <u> </u> | |
| | |
| PCCI COATS Conoval Account Name | |
| RGGI COATS General Account Name | |
| DOOLOOATO Octobril Accessor North Co. | |
| RGGI COATS General Account Number |] |
| | |
| | |
| | |
| Name of Offset Project | Application Date |
| | |
| Summary Description of Offset Project | 1 |
| | |
| Project City Project County Proje | ct State Project Commencement Date |
| | |
| | |
| | |
| | |
| Project Sponsor Organization | |
| Primary Street Address | |
| Timary Gudernaurood | |
| City State/Province | Postal Code Country |
| | |
| Briet Description of Project Sponsor Organization | |
| Telephone Number | Website URL |
| Totophone Humber | TODORO ONE |
| | 1 |
| | |
| Independent Verifier (Company/Organization) | States Where Verifier Accredited |
| macpendent vermer (company/organization) | Ciacos Where Vermer Accreance |
| Primary Street Address | Website URL |
| | |
| City State/Province | Postal Code Country |

Point of Contact for Project

| Contact Telephone Number | er Contact Fax I | Number | Contact Email Address | |
|--------------------------|------------------|-------------|-----------------------|--|
| Contact Street Address | | | | |
| City | State/Province | Postal Code | Country | |

| Offset Project Name | Offset Project ID Code |
|---------------------|------------------------|
| | |
| | |

Form 1.3 – Attestations

The undersigned Project Sponsor certifies the truth of the following statements:

- 1. The offset project referenced in this *Consistency Application* is not required pursuant to any local, state, or federal law, regulation, or administrative or judicial order.
- 2. The offset project referenced in this *Consistency Application* has not and will not be awarded credits or allowances under any other greenhouse gas program.
- 3. The offset project referenced in this *Consistency Application* has not and will not receive any funding or other incentives from the CO₂ Budget Trading Program auction proceeds.
- 4. A Consistency Application for the offset project or any portion of the offset project referenced in this Consistency Application has not been filed in any other participating state.
- 5. All offset projects for which the Project Sponsor or project sponsor organization has received CO₂ offset allowances, if any, under the Project Sponsor's or project sponsor organization's ownership or control (or under the ownership or control of any entity which controls, is controlled by, or has common control with the Project Sponsor or project sponsor organization) are in compliance with all applicable requirements of the CO₂ Budget Trading Program in all participating states.
- 6. I am authorized to make this submission on behalf of the project sponsor organization. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this Consistency Application and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| Project Sponsor Signature | Date |
|---------------------------|--------|
| Printed Name | |
| Title | |
| Organization | Notary |

| Offset Project Name | Offset Project ID Code |
|--|---|
| | |
| Form 1.4 – Project | Sponsor Agreement |
| The undersigned Project Sponsor recognizes at receipt of, CO ₂ offset allowances under the CO ₂ Project Sponsor following all the requirements of undersigned Project Sponsor holds the legal righthe right to act on behalf of a party that holds the Sponsor understands that eligibility for the awar §§ 145.391—145.397 is contingent on meeting 145.397. The Project Sponsor authorizes the Deproject for purposes of verifying that the offset project for purposes of verifying that the offset project sponsor submits to the Project Sponsor submits to the Pennsylvania. | Budget Trading Program is predicated on the of 25 Pa Code §§ 145.391—145.397. The other than the offset project, or has been granted be legal rights to the offset project. The Project of of CO ₂ offset allowances under 25 Pa Code the requirements of 25 Pa Code §§ 145.391—epartment or its agent to audit this offset project, including the Monitoring and scribed in this application. The Project Sponsor the right to enter the physical location of the |
| Project Sponsor Signature | Date |
| | |
| Printed Name | |
| Title | |

Notary

Organization

| Offset Project Name | Offset Project ID Code | |
|---------------------|------------------------|--|
| | | |
| | | |
| | | |

Form 1.5 – Disclosure of Greenhouse Gas Emissions Data Reporting

| Check the box below that applies: | |
|---|--|
| other than the CO ₂ Budget Trading Program. Greenhouse gas emissions data related to the Application have been or will be reported to a | e reported to a voluntary or mandatory program. The offset project referenced in this Consistency a voluntary or mandatory program other than for all such programs to which greenhouse |
| Name of Program to which GHG Emissions Data Report | ted |
| | |
| Check all that apply: | |
| Reporting is currently ongoing | Enter Frequency of Reporting |
| Reporting was conducted in the past | Enter Reporting Start Date |
| Reporting will be conducted in the future | |
| Reporting is mandatory Reporting is voluntary | |
| Program Contact Information – Address | Program Website |
| | |
| Categories of Emissions Data Reported | |
| | |
| Name of Program to which GHG Emissions Data Repor | ted |
| | |
| Check all that apply: | |
| Reporting is currently ongoing | Enter Frequency of Reporting |
| Reporting was conducted in the past | |
| Reporting will be conducted in the future | Enter Reporting Start Date |
| ☐ Reporting is mandatory | |
| Reporting is voluntary | |
| Program Contact Information – Address | Program Website |
| | |
| Categories of Emissions Data Reported | |
| | |

Add extra pages as needed.

Part 2. Category-Specific Information and Documentation Forms

The five (5) forms in Part 2 of the Consistency Application address category-specific requirements and documentation for U.S. Forest offset projects. Instructions for the Part 2 forms are provided below.

Form 2.1 Project Description

Attach a detailed narrative of the actions to be taken as part of the offset project. The attached narrative must include a header that indicates it is an attachment to Form 2.1 and includes the offset project name and offset project ID code. Check the boxes in Form 2.1 to indicate that the narrative includes the required components. The narrative must include the following information:

1. <u>Land Owners</u>. Identify the owner(s) of the land within the offset project boundary. Attach a copy of the deed or title filed with the state or local registrar of deeds. State whether the landowner(s) leased subsurface or surface rights to other parties. Provide a table that includes each owner's name, status (individual, corporation, LLC, partnership, LLP, trust, foundation, cooperative, government entity), ownership share, and expected role (Project Sponsor must be identified), if any, in the management of the offset project. The table should be formatted in a manner consistent with the example below and include a row for each distinct land owner:

| Names on Fee Title | Status | Percent Ownership | Role in Offset Project | |
|--------------------|--------------|-------------------|------------------------|--|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

- 2. <u>Project Area.</u> Identify whether the offset project will take place on private or public lands. Confirm whether the project is located on land that is either owned by, or subject to an ownership or possessory interest of a Tribe, "Indian lands" of a Tribe, as defined by 25 U.S.C. §81(a)(1), or owned by any person, entity, or Tribe, within the external borders of such Indian lands. If the project is located on land that meets any of these criteria, the project must obtain a waiver of sovereign immunity between the tribe and the Participating State. Provide the longitude and latitude of the project, as well as total project area acreage.
- 3. <u>Conservation Easement</u>. Attach a copy of any conservation easements or other legal encumbrances (either an executed copy or a copy of the to-be-executed easement) encumbering the project boundary.
- 4. <u>Identify the Assessment Area(s)</u>. Provide a table that lists each of the Supersections and Assessment Areas associated with the Project Area. The table should include a row for each Assessment Area and be formatted in a manner consistent with the example below:

| Supersection | Assessment Area | Acreage |
|--------------|-----------------|---------|
| | | |
| | | |
| | | |

| Consistency Application – U.S. Forest Projects – Reforestation | | | | | |
|--|--|--|--|--|--|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Form 2.2 Demonstration of Eligibility

Attach documentation to Form 2.2 to demonstrate offset project eligibility. Each attachment must include a header that indicates it is an attachment to Form 2.2 and includes the offset project name and offset project ID code.

The following documentation must be provided:

- 1. <u>Reforestation Land Eligibility</u>. Select which scenario the Project Area land fits under to demonstrate eligibility as a reforestation project, and explain how the land meets either scenario:
 - Less than 10 percent tree canopy cover for a minimum of 10 years
 - Subject to a Significant Disturbance that has removed at least 20 percent of the land's above-ground live biomass
- 2. <u>Reforestation Project Eligibility</u>. Indicate the appropriate "Scenario Number" from Appendix E of the RGGI U.S. Forest Protocol that accurately reflects the Project conditions.
- 3. <u>Project Commencement</u>. Identify the Project Commencement Date, as well as the action being used to demonstrate the offset project commencement date per Section 3.2 of the RGGI U.S. Forest Protocol.
- 4. <u>Demonstration of Natural Forest Management</u>. Describe how the project will meet the definition of Natural Forest Management according to Table 3.2 of the RGGI U.S. Forest Protocol. In order to meet the definition of Natural Forest Management, describe how the project will meet each of the following requirements:
 - <u>Native Species</u>: Describe what percentage of the standing live carbon pool will be comprised of native species. The project must consist of at least 95% native species, or must demonstrate that management practices will lead to this goal being met over the project life. Reforestation projects are initially assessed using estimates of stems per acre.
 - Species Diversity: Describe the percentage each distinct tree species comprises of total basal area. No single species may exceed the maximum percentage shown in the Assessment Area Data File under the "Species Diversity Index" column. If any single species exceeds this percentage, describe how the project will demonstrate a trend towards achieving the Species Diversity Index within the project life.
 - <u>Sustainable Management</u>: Indicate which of the following options the project will use to meet the sustainable management requirement, as applied to all forest landholdings owned or controlled by the Forest Owner.
 - No commercial harvesting is taking place within the Project Area.
 - Third party certification of sustainable management via Forest Stewardship Council (FSC), Sustainable Forestry Initiative (SFI), or Tree Farm System.

- Adherence to a renewable long-term management plan demonstrating sustainable harvest levels sanctioned and monitored by a state or federal agency.
- Employment of uneven-aged silvicultural practices and canopy cover retention averaging at least 40% across forest landholdings, as measured on any 20 acres within the entire forestland owned or controlled by the Forest Owner.
- <u>Structural Elements</u>: Describe how the project will ensure that standing and lying dead wood is retained according to the requirements of Table 3.2 of the RGGI U.S. Forest Protocol for the duration of the project life.
- <u>Legal Requirement</u>: Indicate whether the project is being implemented as result of any law, statute, regulation, court order, or other legally binding mandate. If so, explain.
- <u>Broadcast Fertilization</u>: Indicate whether the project will employ broadcast fertilization.

Form 2.3 Baseline Modeling

Provide documentation of the sequestration baseline where indicated in Form 2.3 or as an attachment to Form 2.3, as directed below. Each attachment must include a header that indicates it is an attachment to Form 2.3 and includes the offset project name and offset project ID code. Multiple attachments may be integrated into a single document, as appropriate, as long as each element is clearly identified, as specified below. For submission of the electronic version of the *Consistency Application*, spreadsheets must be provided as a distinct electronic file or files (distinct spreadsheets may be incorporated into a single spreadsheet file, as appropriate, as long as each element is clearly identified, as specified below). Check the boxes in Form 2.3 to indicate that required documentation is attached and includes the required components.

The following documentation must be provided:

- 1. <u>Modeling Plan</u>. Describe the project's modeling plan according to Appendix B, Section B. 3 of the RGGI U.S. Forest Protocol. Indicate which approved growth model will be used for the project. For Reforestation Projects, this may be deferred until the second required verification.
- 2. <u>Qualitative Description</u>. Provide a qualitative characterization of the Project baseline conditions. In this description, provide a description of the likely natural vegetation conditions or regeneration activities that would have occurred in the absence of the project, taking into consideration all legal mandates that would promote reforestation on the Project Area.

Form 2.4 Monitoring and Verification Plan

Provide the Monitoring and Verification Plan (M&V Plan) as multiple attachments to Form 2.4. Each attachment must include a header that indicates it is an attachment to Form 2.4 and includes the offset project name and offset project ID code. Multiple attachments may be integrated into a single document as long as each element is clearly identified, as specified below. Check the appropriate boxes in Form 2.4 to indicate that required documentation is attached to the form.

The M&V Plan must include the following:

- 1. <u>Designation of Inventory Methodology</u>. Describe the inventory design, detailing the year of the inventory and how the sampling plots were selected. If the project is stratified, include the stratification rules, attach a map of vegetation strata, and describe the results of stratification (area by strata) and the tools for application (GIS, aerial photos, etc.).
- 2. <u>Identification of Sampling Plots</u>. Attach a map depicting the project boundary and the locations of the sampling plots as well as a list of the number, sizes, and coordinates of the plots. The attachment must include recent photos of the plots, and distinct plot identifiers to provide for verification of reported sequestered carbon by an independent verifier or the Department.
- 3. <u>Documentation of Field Measurements</u>. Attach a list that documents all field procedures that will be/were used to take measurements and monument the sampling plots.
- 4. <u>Documentation of the Modeling Plan.</u> Attach the project modeling plan that was used to update the inventory and describe the approved model. The modeling plan must contain all of the elements specified in Appendix B.3 of the RGGI U.S. Forest Protocol
- 5. <u>Assessment of Forest Management Practices if Commercial Timber Harvest Activities Have Occurred</u>. If commercial timber harvest activities are anticipated to occur, attach the assessment or certification issued by the American Tree Farm System (ATFS), Forest Stewardship Council (FSC), Sustainable Forestry Institute (SFI), or other similar organizations as approved by the Department ensuring that the land within the offset project boundary is being managed in accordance with environmentally sustainable forestry practices. If the certification has not been provided yet, state that the certification will be completed prior to the completion of the first reporting period. If no commercial harvesting activities are anticipated to take place, state as such.
- 6. <u>Documentation of Quality Assurance Procedures Conducted</u>. Document the quality assurance procedures for the project that will ensure accuracy in data collection, data analysis, and data storage.

Form 2.5 Reversal Risk Rating

Provide the Reversal Risk Rating calculation in a table formatted in a manner consistent with the table below:

| Risk Category | Forest Projects not on public lands or without a Qualified Conservation Easement | Forest Project on public lands or with a Qualified Conservation Easement |
|-----------------------------------|--|---|
| Financial Risk | 5% (Default Value) | 1% (Default Value) |
| Illegal Forest Biomass Removal | 0% (Default Value) | 0% (Default Value) |
| Conversion | 2% (Default Value) | 0% (Default Value) |
| Over-harvesting | 2% (Default Value) | 0% (Default Value) |
| Social | 2% (Default Value) | 2% (Default Value) |
| Wildfire | Click here to enter text.% (Must be supported per Appendix D Table D.7) or 4% (Default Value) | Click here to enter text.% (Must be supported per Appendix D Table D.7) or 4% (Default Value) |
| Disease or Insect Outbreak | 3% (Default Value) | 3% (Default Value) |
| Other Catastrophic Events | 3% (Default Value) | 3% (Default Value) |

Include the overall calculation of the Reversal Risk Rating according to the calculation formula displayed in Appendix D:

Reversal Risk Rating = 100% - ((1-Financial Risk %) x (1-Illegal Forest Biomass Removal %) x (1 – Conversion %) x (1-Over-harvesting %) x (1-Social Risk %) x (1-Wildfire %) x (1-Disease/Insect Outbreak %) x (1-Other Catastrophic Events %))

| Offse | t Pro | oject Name | Offset Project ID Code |
|-------|-------|--|--|
| | | | |
| | | Form 2.1 – Proj | ect Description |
| narra | ative | | ken as part of the offset project. The attached s an attachment to Form 2.1 and includes the |
| | | ne boxes below to indicate that the follow detailed project narrative or provided th | ring required information is included in the rough accompanying attachments: |
| | 1. | | ner(s) of the land within the offset project with state or local registrar of deeds; statement ce rights leased to other parties |
| | 2. | <u>Project Area</u> . Documentation describing and whether the project is located on tri | whether project is on private or public lands, bal lands. |
| | 3. | <u>Conservation Easement</u> . Copy of consecopy) or any other legal encumbrances | ervation easement (executed or to-be-executed affecting the Project |

4. Assessment Area. Table listing Project Assessment Area(s) by acreage

| Offset Project Name | Offset Project ID Code |
|---------------------|------------------------|
| | |

Form 2.2 – Demonstration of Eligibility

| . c <u></u> |
|---|
| Attach documentation to demonstrate offset project eligibility. Each attachment must include a header that indicates it is an attachment to Form 2.2 and includes the offset project name and offset project ID code. |
| Check the boxes below to indicate that the following required documentation is attached: |
| 1. Reforestation Land Eligibility. Select which scenario the Project fits under, and explain how the Project meets the selected scenario. |
| Less than 10 percent tree canopy cover for a minimum of 10 years Subject to a Significant Disturbance that has removed at least 20 percent of the land's above-ground live biomass |
| 2. <u>Project Commencement</u> . Identify project commencement date and provide documentation as evidence of action identifying the commencement date. |
| □ 3. Natural Forest Management. Describe how the project will meet the Natural Forest Management requirements. □ Native Species □ Species Diversity |
| ☐ Species Diversity ☐ Sustainable Management ☐ Structural Elements |
| 4. <u>Legal Requirement</u>. Describe the legal framework of the project (federal, state, local regulations) and explain why this project is not legally required. 5. <u>Broadcast Fertilization</u>. Confirm that the project does not and will not use broadcast |
| fertilization. |

| Offset Project Name | | Offset Project ID Code |
|------------------------------|---|---|
| | Form 2.3 – | Baseline Modeling |
| Each attachi includes the | ment must include a header tha offset project name and offset ito a single document, as appro | aseline modeling methodology and preliminary data. at indicates it is an attachment to Form 2.3 and project ID code. Multiple attachments may be priate, as long as each element is clearly identified, |
| Check the b | oxes below to indicate that the | following required documentation is attached: |
| Des | | ed forest growth model being used for the project. rdance with Appendix B of the RGGI U.S. Forest |

 $\ \square$ 2. <u>Qualitative Description</u>. Provide a qualitative characterization of the baseline conditions.

| Offset Project Name | Offset Project ID Code |
|---------------------|------------------------|
| | |

Form 2.4 – Monitoring and Verification Plan

| atta the a sii | chm offs ngle | the Monitoring and Verification Plan (M&V Plan) as multiple attachments. Each nent must include a header that indicates it is an attachment to Form 2.4 and includes et project name and offset project ID code. Multiple attachments may be integrated into a document as long as each element is clearly identified, as specified below. |
|----------------------|---------------------|---|
| Che atta | | the boxes below to indicate that the following required components of the M&V Plan are d: |
| | 1. | <u>Documentation of Project Inventory</u> . Description of the inventory design and plot selection process. List of stratification rules, map of vegetation strata, and description of vegetation strata, if applicable. |
| | 2. | <u>Identification of Sampling Plots</u> . Map of sampling plots and list of number, sizes, and locations of all sampling plots used for developing the project inventory, including recent photos and distinct sampling plot identifiers. |
| | 3. | <u>Documentation of Field Measurements</u> . List all field procedures used to take measurements and monument the sampling plots. |
| | 4. | <u>Documentation of the Modeling Plan</u> . Description of approved model and the modeling plan used to update the project inventory. |
| | 5. | Assessment of Forest Management Practices if Commercial Timber Harvest Activities Have Occurred. If applicable, the assessment or certification issued by American Tree Farm System (ATFS), Forest Stewardship Council (FSC), Sustainable Forestry Institute (SFI), or such other similar organizations as approved by the Department ensuring that the land within the offset project boundary is being managed in accordance with environmentally sustainable forestry practices. |
| | 6. | <u>Documentation of Quality Assurance Procedures Conducted</u> . Documentation of quality assurance procedures conducted during the reporting period to ensure accuracy in data collection, data analysis, and data storage. |
| | | |

| Offset Project Name | Offset Project ID Code |
|---|--|
| Form 2.5 – | Reversal Risk Rating |
| Submit Form 2.5 detailing the calculation of Appendix D of the RGGI U.S. Forest Proto | of the project's Reversal Risk Rating according to ocol. |
| Check the boxes below to indicate that the attached: | e following required components of the M&V Plan are |
| 1. <u>Reversal Risk Rating Table</u> . Provide each risk category. | de the table identifying the reversal risk rating for |

☐ 2. Reversal Risk Rating Calculation. Show the Reversal Risk Rating calculation in accordance with the formula in Appendix D.

Part 3. Independent Verification Form

The form in Part 3 of the *Consistency Application* addresses the requirements and documentation related to the independent verifier certification statement and report. Instructions for the form in Part 3 are provided below.

Form 3.1 Independent Verifier Certification Statement and Report

An accredited independent verifier must sign and date the form. Submit the originally signed form as part of the paper hardcopy of the *Consistency Application*. Scan the signed and dated form for submission as part of the electronic version of the *Consistency Application*.

Provide the independent verifier report as an attachment to Form 3.1. The verifier report must include a header that indicates it is an attachment to Form 3.1 and includes the offset project name and offset project ID code.

The verifier report must document the following:

- The verifier has reviewed the entire Consistency Application and evaluated the contents of the application in relation to the applicable requirements of 25 Pa Code §§ 145.391—145.397.
- 2. The verifier has evaluated the adequacy and validity of information supplied by the Project Sponsor to demonstrate that the offset project meets the applicable eligibility requirements of 25 Pa Code § 145.393, § 145.394 and § 145.395.
- 3. The verifier has evaluated the adequacy and validity of information supplied by the Project Sponsor to demonstrate baseline CO₂-equivalent sequestration, pursuant to the applicable requirements of 25 Pa. Code § 145.395.
- 4. The verifier has evaluated the adequacy of the monitoring and verification plan submitted pursuant to 25 Pa. Code § 145.395.

The verifier report must include the following contents, in the order listed below:

- Cover page with report title and date
- Table of contents
- List of acronyms and abbreviations
- Executive summary
- Description of objective of report
- Identification of the client, including name, address, and other contact information
- Identification of the offset project
- Description of evaluation criteria (applicable regulatory provisions and documentation requirements specified in Consistency Application)
- Description of the review and evaluation process, including any site visits and interviews
- Identification of individuals performing the verification work, including the verification team leader and key personnel, and contact information for the team leader

- Description of the materials provided to the verifier by the Project Sponsor
- Evaluation conclusions and findings, including level of assurance provided

| Offset Project Name | | Offset Project ID Code | |
|---------------------|--|---|--|
| | | | |
| | Form 3.1 – Independent Verifier (| Certification Statement and Report | |
| | pendent verifier report. The attached verific | sign and date Form 3.1. Attach the accredited er report must include a header that indicates it is set project name and offset project ID code. | |
| Name | e of Accredited Independent Verifier | | |
| App | tify that the accredited independent verifier lication, including all forms and attachments wing: | identified above reviewed the <i>Consistency</i> s, in its entirety, including a review of the | |
| (a) | that the offset project meets the applicabl | supplied by the Project Sponsor to demonstrate e eligibility requirements of 25 Pa Code § ling the required documentation that must be | |
| (b) | The adequacy and validity of information supplied by the Project Sponsor to demonstrate baseline CO ₂ -equivalent sequestration, pursuant to the applicable requirements of 25 Pa Code § 145.393, § 145.394 and § 145.395, including the required documentation that must be provided in the <i>Consistency Application</i> . | | |
| (c) | The adequacy of the Monitoring and Verification Plan in accordance with the applicable requirements of 25 Pa. Code § 145.395 including the required documentation that must be provided in the <i>Consistency Application</i> . | | |
| | rification report is attached that documents includes evaluation conclusions and finding | the verifier's review of the items listed above gs. | |
| | Verifier Representative Signature | Date | |
| | Printed name | | |
| | Title | | |
| | | Notary | |



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Pennsylvania CO₂ Budget Trading Program

Offset Verifier Accreditation Application

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1. Overview

An organization that intends to provide verification services for an offset Project Sponsor under the Pennsylvania CO₂ Budget Trading Program must be accredited by the Department of Environmental Protection (Department). To apply for accreditation, a prospective verifier must submit to the Department in accordance with these instructions a fully completed *Application for Accreditation Version 1.1* ("Accreditation Application"), including all forms and required attachments. Following these instructions will ensure that the Accreditation Application contains all necessary information and is submitted properly.

Each prospective verifier should review the CO₂ Budget Trading Program regulations at 25 Pa Code §§ 145.391—145.397 that address offset projects, offset project verification, and the award of CO₂ offset allowances. Prospective verifiers should also review the offset application and submittal materials for the offset categories for which they seek to provide verification services. All offset application and submittal materials are available at www.dep.pa.gov/RGGI.

2. Submission Instructions

Submit one (1) complete hardcopy original *Accreditation Application* and one (1) electronic copy in the form of a CD disk to the Department at the location specified below. Submit hardcopies of forms requiring signatures as originally-signed copies and scan such signed forms for electronic submission. Facsimiles of the *Accreditation Application* are not acceptable under any circumstances.

Pennsylvania Department of Environmental Protection c/o Bureau of Air Quality
Rachel Carson State Office Building, P.O. Box 8468
Harrisburg, PA 17105-8468

The Accreditation Application has been created as a PDF document with editable fields. Enter information directly in the fields provided in the forms or submit an attachment with the information or documentation requested, as instructed. Include headers on all attachments indicating the form to which each is attached.

The applicant should save an electronic copy of the *Accreditation Application* for its file to serve as a reference for any necessary application remediation or updates.

3. Accreditation Application Forms

The Accreditation Application includes seven (7) forms:

- Form 1 Contact Information
- Form 2 Offset Categories
- Form 3 Documentation of ANSI ISO14065 Accreditation
- Form 4 Verification Team
- Form 5 Work Product Sample
- Form 6 Documentation of Professional Liability Insurance
- Form 7 Attestations

Form 1: Contact Information Name of Applicant (Organization): Point-of-Contact: Mailing Address: Telephone Number: Fax Number: E-mail: Describe the nature of the Applicant's core business or organization. Additionally, describe the structure of the Applicant's organization, including whether the entity is a sole proprietorship, partnership, limited partnership, limited liability company (LLC), limited liability partnership (LLP), corporation (for-profit), nonprofit corporation (not-for-profit), or cooperative. If a field below is not applicable or is unanswerable, respond with "NA". Describe the Nature of the Applicant's Core Business or Organization and Organizational Structure: Place of Incorporation: Federal Tax Identification Number: Dun & Bradstreet or DUNS Number: Year Founded:

Website URL:

Form 2: Offset Categories

Identify the offset project categories for which the Applicant seeks accreditation by checking the appropriate box(es) below.

| Offset Project Category | Accreditation Sought |
|---|-------------------------|
| Landfill methane capture and destruction | |
| Sequestration of carbon due to afforestation | |
| Sequestration of carbon due to improved forest management, reforestation, and/or avoided conversion | |
| Avoided methane emissions from agriculture manure management operations | |

Form 3: Documentation of ANSI ISO 14065 Accreditation

Provide the following details of the Applicant's ANSI ISO 14065 accreditation in the fields below. Attach a copy of the certificate of accreditation. The attachment must include a header that identifies it as an attachment to Form 3.

| ANSI Accreditation No.: | |
|--|--|
| Date of Initial Accreditation: | |
| Accreditation Valid Until: | |
| Scope of ANSI Accreditation: | |
| | |
| Has the Applicant's ANSI accreditation ever been suspended or withdrawn? If yes, please describe the grounds for suspension/withdrawal and the measures taken to become re-accredited: | |

Form 4: Verification Team

In the fields below, identify the Offset Project Category, Verification Team Leader(s), and Key Personnel that will provide verification services (add additional pages as required). In the organizational affiliation column, indicate the organization that employs the individual. If accreditation is being sought for more than one offset project category, provide a separate Form 4 for each offset project category for which accreditation is being sought.

| Offset Project Category | | | | |
|------------------------------|------|----------------------------|--|--|
| | | | | |
| Verification Team | | 1 | | |
| Role | Name | Organizational Affiliation | | |
| Verification Team Leader: | | | | |
| Verification Team Leader: | | | | |
| Key Personnel: | | | | |

Provide as an attachment detailed resumes for all Verification Team Leaders(s) and Key Personnel. Resumes should include identification of any audit certification or registration programs under which the individual is accredited or certified, such as Professional Forester status.

If any of the individuals listed above are not employees of the Applicant, attach a signed copy of the contract or engagement letter between the individual and the Applicant.

Each attachment must include a header that identifies it as an attachment to Form 4.

Form 5: Work Product Sample

Attach a sample of at least one relevant work product produced in whole or part by the Applicant. The sample must consist of a final report or other material provided to a client under contract. The sample work product submitted shall not contain any proprietary information. If the original work product contained proprietary information, the work sample may be submitted, provided proprietary information is redacted from the document. The attachment must include a header that identifies it as an attachment to Form 5.

| Provide a description of the attached work sample(s) in the space provided below. If the work product was jointly produced by the Applicant and another entity, include in the description ar explanation of the role of the Applicant in producing the work product. | | |
|---|--|--|
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Form 6: Documentation of Professional Liability Insurance

Provide documentation in the fields below of professional liability insurance held by the Applicant in an amount not less than one million U.S. dollars. Attach a copy of the insurance certificate and other documentation as may be required to document the relationship between a related entity that holds the insurance and the Applicant. The attachment(s) must include a header that identifies it as an attachment to Form 6.

| Name of Insurer: | |
|---|--|
| | |
| Policy Number: | |
| Amount of Coverage (US\$): | |
| Policy Expiry Date: | |
| Deductibles (if any): | |
| Exclusions (if any): | |
| Name of the entity under which the insurance is held: | |
| If the insurance coverage is held under the name of a related entity, describe the financial relationship between the Applicant and the related entity and attach supporting documentation: | |

Form 7: Attestations

The following attestations must be made.

The undersigned Applicant acknowledges and will comply with and be bound by the following:

- 1. The undersigned Applicant shall provide any verification services to offset Project Sponsors in accordance with 25 Pa Code §§ 145.391—145.397.
- 2. The undersigned Applicant shall use suitably qualified personnel and devote and employ sufficient resources and labor to ensure that high-quality verification services are provided.
- 3. The undersigned Applicant shall ensure that for any verification services undertaken by the Applicant:
 - (a) a Verification Team Leader identified in the *Accreditation Application* directs, supervises, and leads the undertaking of those services and signs all written reports or opinions to be provided by the accredited verifier;
 - (b) verification services are undertaken by a Team Leader and Key Personnel identified in the application for accreditation; and
 - (c) any other staff, employees, or contractors used by the accredited verifier in connection with verification services:
 - (i) are used only to assist any Verification Team Leader and Key Personnel identified in the *Accreditation Application*; and
 - (ii) shall work under the direct control, supervision, and direction of a Verification Team Leader and Key Personnel identified in the *Accreditation Application*.
- 4. The undersigned Applicant shall ensure that each Verification Team Leader and Key Personnel identified in the *Accreditation Application* maintain the qualifications identified in the *Accreditation Application*, including any identified qualifications, licenses, and certifications.
- 5. The undersigned Applicant shall ensure that each Verification Team Leader and Key Personnel identified in the *Accreditation Application* undertake and complete any training as may be required by the Department to demonstrate competence in the provision of verification services for individual offset categories specified at 25 Pa Code §145.396(a)(1).
- 6. The undersigned Applicant acknowledges that the Department or its agent may conduct a performance review of an accredited verifier to evaluate whether the accredited verifier remains qualified and is providing verification services in accordance with the requirements of 25 Pa Code §§ 145.391—145.397. As part of a performance review, the Applicant will provide access to any reports, documents, or other information related to the provision of verification services by the Applicant pursuant to 25 Pa Code §§ 145.391—145.397 required by the Department or its agent.

- 7. The undersigned Applicant acknowledges that prior to engaging in verification services for an offset Project Sponsor, the Applicant shall disclose all relevant information to the Department to allow for an evaluation of potential conflict of interest with respect to an offset project, offset project developer, offset Project Sponsor or project sponsor organization, or any other party with a direct or indirect financial interest in an offset project that is seeking or has been granted approval of a Consistency Application under a state CO₂ Budget Trading Program, including information concerning the Applicant's ownership, past and current clients, related entities, as well as any other factsor circumstances that have the potential to create a conflict of interest.
- 8. The undersigned Applicant acknowledges that it shall have an ongoing obligation to disclose to the Department any facts or circumstances that may give rise to aconflict of interest with respect to an offset project, offset project developer, offset Project Sponsor or project sponsor organization, or any other party with a direct or indirect financial interest in an offset project.
- 9. The undersigned Applicant acknowledges that it shall have an ongoing obligation to maintain one million U.S. dollars of professional liability insurance throughout the period for which it is accredited.
- 10. The undersigned Applicant acknowledges that the Department may revoke the accreditation of a verifier at any time, for any of the following:
 - (a) failure to fully disclose any issues that may lead to a conflict of interest situation with respect to an offset project, offset project developer, or offset Project Sponsor;
 - (b) the verifier is no longer qualified due to changes in staffing or other criteria;
 - (c) negligence or neglect of responsibilities pursuant to the requirements of 25 Pa Code §§ 145.391—145.397 and
 - (d) intentional misrepresentation of data or other intentional fraud.

I certify that the undersigned is authorized to make these attestations on behalf of the Applicant. I certify that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete.

| Signature of Authorized Representative | Date | |
|--|-------------------|------|
| Name in Print | _ | |
| Title | _ | |
| Sworn and subscribed before me on this | day of | , 20 |
| | Notary Public | |

REGIONAL GREENHOUSE GAS INITIATIVE (RGGI) ENROLLMENT - CO2 AUCTION 52-CURRENT CONTROL PERIOD

| GENERAL INFO & AUTHORIZ | ED AUCTION REF | P(S) | | | |
|--|-------------------------|---------------|----------|------------------|------------|
| Applicant Name * | | | | | |
| | | | | | |
| Street Address * | | City * | | | |
| | | | | | |
| Country / Region * | State / Province * | | | Postal Code * | |
| | | | | | |
| Applicant Category * | | | | | |
| O Individual | | | | | |
| Other Corporate Entity | | | | | |
| Describe the Nature of the Applicant's C | Core Business or Orgar | nization * | | | |
| | | | | | |
| Place of Incorporation (City, State, Coun | try) * | | Federal | Tax ID * | DUNS # 🛂 * |
| | | | | | |
| Years In Business * | Web Site | | | | |
| | | | | | |
| See the most recent auction notice section | on titled 'Authorized A | Auction Repre | sentativ | e' for more info | rmation. |
| Primary Authorized Auction Represen | tative | | | | |
| First Name * | Last Name * | | | Title * | |
| | | | | | |
| Office Phone (Primary) * | Mobile Phone (Seco | ndary) | | | |
| | | | | Fax | |
| | | | _ | | |

Company *

| Street Address * | City * | Country / Region * |
|-----------------------------------|--------------------------|--------------------|
| | | |
| State / Province * | Postal Code * | |
| | | |
| Is there a Secondary Authorized A | uction Representative? * | |
| Yes | | |
| Secondary Authorized Auction R | epresentative | |
| First Name * | Last Name * | Title * |
| | | |
| Office Phone (Primary) * | Mobile Phone (Secondary) | |
| | | Fax |
| | | |
| Company * | Email Address * | |
| | | |
| Street Address * | City * | Country / Region * |
| | | |
| State / Province * | Postal Code * | |
| | | |
| | | |

Email Address *

 \checkmark I authorize the Secondary Authorized Auction Representative to act on behalf of the Applicant in the remediation of the Qualification Application and/or Intent to Bid. *

| Information regarding the applicant's RGGI CO🛽 Allowance Tracking System (RGGI COATS) account must be provided. This | s is |
|--|------|
| the account into which all awarded COI allowances will be deposited. | |
| | |

| KGG | I COATS Account Number | | |
|-----|------------------------|--|--|
| | | | |
| | | | |

COATS ACCOUNT VALIDATION

CORPORATE ASSOCIATIONS

See the <u>most recent auction notice</u> sections titled Identifying Direct and Indirect Corporate Associations and Use of Direct and Indirect Corporate Associations for more information.

| Does the Applicant hav | re a direct of indirect Corpo | rate Association with another applicant: |
|--------------------------------|-------------------------------|--|
| Yes | O No | |
| An affirmative answer to | o this statement requires dis | sclosure of the direct or indirect Corporate Association(s) below. |
| Name of Applicant * | Bid Limitation (%) * | |
| | | (cannot exceed 25%) |
| Name of Associated Applicant * | Bid Limitation (%) * | The Type of Association (i.e. Direct or Indirect) and a Brief Description of the Association * |
| | | |
| | | |
| | | |
| | | |

Total = 0%

BIDDING ASSOCIATIONS

The information in each Applicant's Qualification Application will be used to limit the quantity of CO2 allowances bid by each party in the Bidding Association. See the <u>most recent auction notice</u> sections titled "Identifying Bidding Associations" and "Use of Bidding Associations" for more information and examples.

| Does the Applicant have | e or exp | pect to have a Biddi | ng Association with another party? * |
|--------------------------|----------|----------------------|---|
| Yes (|) No | 0 | |
| An affirmative answer to | this st | atement requires dis | sclosure of the bidding association(s) below. |
| Does the Bidding Associ | iation i | nvolve bidding on a | specific quantity of COI allowances? * |
| Yes (| No | 0 | |
| Bidding Associations N | lot Inv | olving a Specific Qu | uantity of CO [®] Allowances |
| Name of Applicant * | | Bid Limitation (%) * | |
| | | | (cannot exceed 25%) |
| Name of Other Party * | | Bid Limitation (%) * | The Type of Bidding Association and a brief Description of the association (Reference Notice Section 7.2.3.3 a-d) * |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Total = 0%

ATTESTATIONS & SIGNATURE

The following attestations must be made.

The applicant must answer yes or no for attestations 1-5. If the Applicant answers affirmatively to any of attestations 1-5, an explanation must be provided. An affirmative answer to any of these attestations does not automatically disqualift the Applicant. The explanation provided will be used to inform the decision regarding the applicant's qualification status. Include additional pages if necessary.

| 1.1 | r any of its corporate officers, directors, principals, members (if the applicant is a LLC or LLP), or for a felony, in any federal or state jurisdiction, within the five (5) years up to and including the on Application? * |
|---------------------------|---|
| O Yes | No |
| | |
| | r any of its corporate officers, directors, principals, members (if the applicant is a LLC or LLP), or nt been convicted of a felony, within the five (5) years preceding the date of this Qualification |
| O Yes | No |
| | |
| violation of any law, rul | een subject to any civil penalties, judgements, sanctions, or consent decrees arising out of the e, regulation, or ordinance in connection with any commodity market ② or exchange, or by the e Commission or Commodity Futures Trading Commission? * |
| O Yes | No |
| | |
| 4. Has the Applicant ha | nd any permit or authority to do business in any jurisdiction revoked or suspended? * |
| O Yes | No |
| | |
| | een found to be non-responsible with regard to any federal, state, or local procurement, barred sanctioned for unauthorized disclusure of confidential information? * |
| O Yes | No |
| | |

All the information provided in this Qualification Application is accurate, true, and not misleading.

The Primary Authorized Auction Representative designated on Form 2 is authorized to represent the Applicant in all matters regarding CO[®] Allowance Auctions.

The Secondary Authorized Auction Representative designated on Form 2 is authorized to (1) submit bids on behalf of the Applicant in any CO2 Allowance Auction; (2) submit an Intent to Bid on behalf of the Applicant for any CO2 Allowance Auction; and (3) act on behalf of the Applicant in the remediation of the Qualification Application and/or any Intent to Bid.

The Applicant will be responsible for all confidential information regarding the COI Allowance Auctions and will not publicly

release confidential information, to the extent permitted by applicable state law.

Yes

No

The Applicant, individually or in combination with any applicant with which the Applicant has a corporate or bidding association, will not seek to bid in aggregate more than 25% of the CO2 allowances offered for sale in any single auction.

The Applicant, if not a compliance entity required by the laws or rules of one of the RGGI participating states to hold CO② allowances equal to emissions, hereby attests and agrees that with respect to the applicant's purchase, sale, holding or transfer of any CO② allowance, the Applicant shall be subject to the personal jurisdiction and venue of courts of any of the RGGI participating states for adjudication of claims relating to fraudulent, misleading, manipulative, collusive or noncompetitive behavior arising out of such purchase, sale, holding, or transfer.

| Do you assert that the submitted info | rmation in this form is confidential? * | |
|---------------------------------------|---|---|
| | | |
| Signature * | Title * | Date * |
| I acknowledge and accept the a | above attestations. * | |
| 9 | | or in a RGGI CO2 Allowance Auction or in the h any and all applicable regulations and laws. |
| , , | of such purchase, sale, holding, or transfe | |

| INTENT TO BID & SIGNATURE |
|--|
| ▼ The Applicant intends on participating in CO2 Auction 52-Current Control Period. * |
| A previously qualified applicant with a material change to the information previously submitted in its qualification application becomes a new applicant and must follow the requirements and procedures outlined in <u>Auction Notice</u> Section 2.2. Specific criteria outlining what constitutes a material change to previously submitted information in a qualification application are: |
| <u>General Information</u> : Any change constitutes a material change, except for "Street Address", "City", "State/Province [first occurrence], "Postal Code", "Country", "Years in Business", and "URL for Applicant's Web Site". |
| <u>Authorized Auction Representatives</u> : Only a change to the Authorized Auction Representative(s) "First Name" and/c "Last Name" constitutes a material change. |
| COATS Account Validation: Any change constitutes a material change. |
| <u>Corporate Associations</u> : Any change constitutes a material change if a previously qualified applicant intends to participate in RGGI-Auction 52-Current Control Period. |
| <u>Bidding Associations</u> : Any change constitutes a material change if a previously qualified applicant intends to participate in RGGI-Auction 52-Current Control Period. |
| Attestations: Any change constitutes a material change. |
| For any non-material change(s), provide it in writing to the Auction Manager via email at auctionmanager.enelxnorthamerica@enel.com |
| Does the Applicant have a material change as defined above and will be submitting the Qualification Application? * |
| ○ Yes |
| Please indicate if the Applicant has a business relationship with the RGGI Auction Manager (Enel X) and/or the independent Market Monitor (Potomac Economics) |
| ☐ Enel X North America, Inc. ☐ Potomac Economics |
| The following attestations must be made: |
| 1. All the information provided herein is accurate, true, and not misleading. |
| 2. The Applicant has read and understands the auction procedures and requirements as outlined in the Auction Notice |

- <u>e</u>.
- 3. The Applicant will comply with and be bound by the auction procedures and requirements as outlined in the Auction Notice.
- 4. The Applicant acknowledges that failure to comply with any of the auction procedures or requirements, as contained in the Auction Notice, may result in a procedure violation and barring from RGGI-Auction 52-Current Control Period and/or future CO Allowance Auctions.
- 5. The Applicant acknowledges that any fraudulent, misleading, manipulative, collusive or noncompetitive behavior in a RGGI COI Allowance Auction or in the COI allowance market may be investigated and prosecuted in accordance with any and all applicable regulations and laws.
- 6. The undersigned is authorized to make these attestations on behalf of the Applicant.

| ✓ I agree to t | he above terms * | | |
|-------------------|-------------------------|---------------------------------------|--------|
| Signature * | | Title * | Date * |
| | | | |
| Do you assert tha | at the submitted inform | ation in this form is confidential? * | |
| Yes | O No | | |
| | | | |
| | | | |

| FINANCIAL SE | CURITY | | | |
|--------------------------|-------------------------|----------------------------|---------------------|---|
| In the field below indic | ate the amount of finan | ncial security provided wi | th certified funds. | |
| Total Financial Security | Amount (USD) * | | | |
| | | | | |
| | | ' ' | - | edit. Information on where es or making an optional casl |
| Security Type * | Account Name * | ABA Number * | Account Number * | Account Type * |

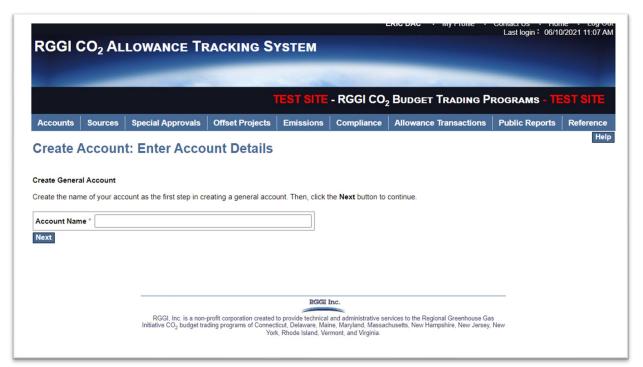
BIDDER REGISTRATION

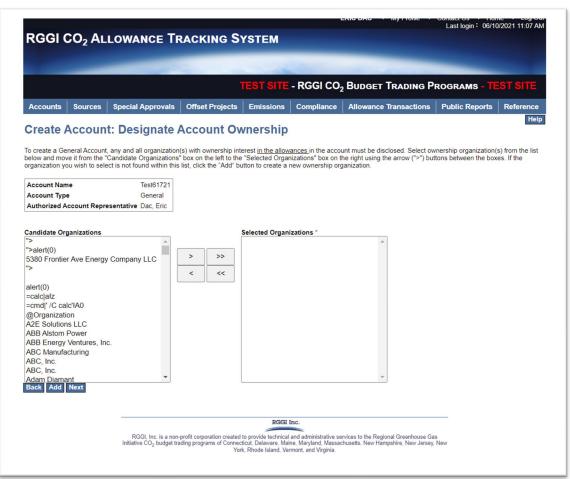
If you would like the opportunity to participate in future Enel X Energy Exchange procurement events please complete the form below. Upon submission your information will be reviewed and a member of our Operations team will contact you. If you have previously registered and forgot your password, please click here to retrieve your password.

| Yes No | | |
|---|---|----------------------------|
| Company Information | 1 | |
| Legal Company Name * | | Business Type * |
| | | |
| Street Address * | City * | |
| | | |
| Country / Region * | State / Province * | Postal Code * |
| United States | Select One | |
| Annual Revenue * | Total Employees * | Years In Business * |
| | | |
| | Web Site | |
| Primary Contact | https:// | |
| Primary Contact First Name * | https:// | Title * |
| Primary Contact First Name * | | Title * |
| - | https:// Last Name * Mobile Phone | |
| First Name * | https:// Last Name * | Title * |
| First Name * Office Phone (Primary) | https:// Last Name * Mobile Phone | |
| First Name * | https:// Last Name * Mobile Phone | Fax |
| Office Phone (Primary) Email Address * | https:// Last Name * Mobile Phone (Secondary) | Fax |
| First Name * Office Phone (Primary) | https:// Last Name * Mobile Phone (Secondary) | Fax ess Country / Region * |
| Office Phone (Primary) Email Address * | https:// Last Name * Mobile Phone (Secondary) | Fax |

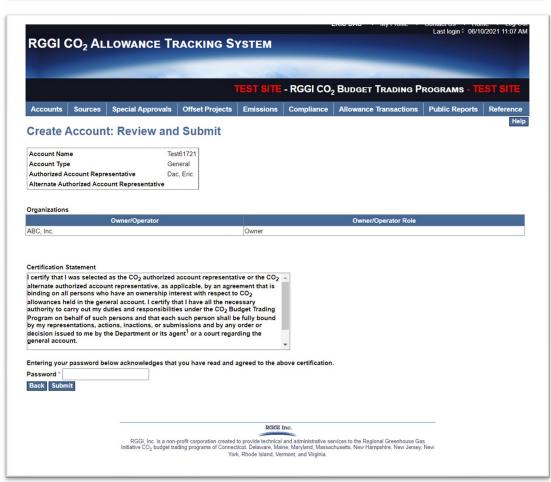
| | Last Name * | Title * |
|--|-----------------------------|----------------------------|
| Office Phone (Primary) * | Mobile Phone (Secondary) | Fax |
| Email Address * | | |
| | copy company | address |
| Street Address * | City * | Country / Region * |
| | | United States |
| State / Province * | Postal Code * | |
| Select One | | |
| Please select all the cor | | cural Gas |
| | | |
| Comments | | |
| Please use the text area | a below to specify any a | dditional comments you may |
| Please use the text area | a below to specify any a | dditional comments you may |
| Please use the text area | a below to specify any a | dditional comments you may |
| Please use the text area | a below to specify any a | dditional comments you may |
| Comments Please use the text area have | a below to specify any a | |

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| | ST SITE - RGGI CO ₂ BUDGET TRADING PROGRAMS - TEST SIT Emissions Compliance Allowance Transactions Public Reports Referen |
|--|---|
| reate Account: Select Alternate Authoriz | |
| | |
| elect the optional Alternate Authorized Account Representative AAAR"), if any, for the General Account using the radio buttons in the | Filter Criteria ▼ |
| rid below. The grid is initially blank and you must first enter filter iteria in the box to the right to display a specific AAAR or list of | First Name |
| AARs. The designated AAAR will have the same system permissions or the General Account as the AAR. Note that the grid can be sorted | Last Name |
| clicking on the grid column | Organization Name |
| | Filter Clear |
| | |
| account Name Test61721 | |
| ccount Type General | |
| authorized Account Representative Dac, Eric | |
| | |
| rganizations | |
| Owner/Operator | Owner/Operator Role |
| BC, Inc. | Owner |
| ternate Authorized Account Representative | |
| Name | Organization Name |
| No people match your current filter cri | riteria entered in the box at the top right of the screen. |
| Back Add Next | |
| Add Next | |
| | |
| | |



RGGI CO₂ ALLOWANCE TRACKING SYSTEM

RGGI CO₂ BUDGET TRADING PROGRAMS

Home Login Reference

Help

Registration Information for Access to RGGI COATS

Users who are representatives of RGGI COATS accounts and need to manage these accounts through the RGGI COATS system must complete the registration below to access the system. Registration is not required for members of the public who wish to access public reports and do not require ability to log in to the RGGI COATS system. Fields marked by * are required.

Step 1: Enter Information Title (Mr./Ms.) First Name * Last Name * Middle Initial Phone Number * Fax Number **Company Name** Address * Address City * Country * State/Province Postal Code * Reason for requesting a login * Important: Enter a valid email address to receive notification of your completed registration as a user. Valid RGGI COATS passwords are at least eight characters in length and contain at least one of each of the following: an alphabetic character, a numeric character, and special character (@#\$!, etc.). Email Address * Re-enter email address * Email Salutation (e.g. Bill Smith,) * Create your RGGI COATS username * Create your password * Re-enter password * Back Next

RGGI Inc.

RGGI, Inc. is a non-profit corporation created to provide technical and administrative services to the Regional Greenhouse Gas Initiative CO₂ budget trading programs of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, Vermont, and Virginia.