

# Regional Greenhouse Gas Initiative CO<sub>2</sub> Budget Trading Program



## Offset Project Monitoring and Verification Report Forms

### Reductions in Emission of SF<sub>6</sub>

#### Version 1.1

Issued by:  
Bureau of Energy and Technology Policy  
CT Department of Energy & Environmental Protection  
<http://www.ct.gov/deep/>

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## 1. Overview

To demonstrate the achievement of CO<sub>2</sub>-equivalent emissions reductions from an SF<sub>6</sub> offset project that has received a consistency determination from the Connecticut Department of Energy & Environmental Protection (“Department”), a Project Sponsor must submit to the Department in accordance with instructions (see accompanying instructions packet) a fully completed *Offset Project Monitoring and Verification Report – Reduction in Emissions of SF<sub>6</sub> Version 1.1* (“M&V Report”), consisting of the coversheet and all forms and related attachments. Following these instructions will ensure that the M&V Report contains all necessary information and is submitted properly.

The Project Sponsor should review the CO<sub>2</sub> Budget Trading Program regulations at (section 22a-174-31a of the Regulations of Connecticut State Agencies (“RCSA”) addressing offset projects and the award of CO<sub>2</sub> offset allowances. All offset project submittal materials and documents are available at [www.ct.gov/deep/cwp/view.asp?a=2684&Q=440696&depNav\\_GID=1619](http://www.ct.gov/deep/cwp/view.asp?a=2684&Q=440696&depNav_GID=1619).

## 2. Submission Instructions

Please complete this form and supporting documents in accordance with section 22a-174-31a of the RCSA ([www.ct.gov/deep/lib/deep/air/regulations/mainregs/22a-174-31a.pdf](http://www.ct.gov/deep/lib/deep/air/regulations/mainregs/22a-174-31a.pdf)), the RGGI Model Rule ([www.rggi.org/documents](http://www.rggi.org/documents)) and accompanying instructions to ensure the proper handling of your application. These instructions are not a substitute for the requirements of the relevant statutes and any regulations thereunder. You should review all applicable laws prior to completing this application. Remember, it is your responsibility to comply with all applicable laws. There is no fee associated with the submission of this application.

Submit one (1) complete paper hardcopy original and one (1) electronic copy of the M&V Report in the form of a CD disk. Submit hardcopies of forms requiring signatures as originally-signed copies and scan such signed forms for electronic submission. Facsimiles of the M&V Report are not acceptable under any circumstances.

ATTN: STEFANIE WNUCK  
CO2 BUDGET TRADING PROGRAM  
BUREAU OF ENERGY AND TECHNOLOGY POLICY  
CT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION  
10 FRANKLIN SQUARE  
NEW BRITAIN, CT 06051

If you have any questions about this application, please contact Stefanie Wnuck at [stefanie.wnuck@ct.gov](mailto:stefanie.wnuck@ct.gov) or at (860) 827-2846.

The M&V Report includes three parts, as described below. Each part comprises specified forms and required documentation. The M&V Report 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 instructed. 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. M&V Report Forms

The M&V Report consists of eight (8) 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 Statement
- Form 1.5 – Disclosure of Greenhouse Gas Emissions Data Reporting

**Part 2. Category-Specific Information and Documentation Forms**

- Form 2.1 – Demonstration of Conformance with M&V Plan
- Form 2.2 – Determination of Emissions Reduction

**Part 3. Independent Verification Form**

- Form 3.1 – Independent Verifier Certification Statement and Report

Note that the forms themselves include many embedded instructions, Project Sponsors are advised to consult the accompanying instructions packet for full instructions and documentation requirement.

**Offset Project Name**

**Offset Project ID Code**

**Form 1.1 – Coversheet**

**Project Sponsor (RGGI COATS Authorized Account Representative)**

**Project Sponsor Organization**

**Reporting Period**

**RGGI COATS General Account Name**

**RGGI COATS General Account Number**

Check the boxes below to indicate submission of the following required forms:

- Form 1.2 – General Information
- Form 1.3 – Attestations
- Form 1.4 – Project Sponsor Statement
- Form 1.5 – Disclosure of Greenhouse Gas Emissions Data Reporting
- Form 2.1 – Demonstration of Conformance with M&V Plan
- Form 2.2 – Determination of Emissions Reduction
- 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**

**City**  **State/Province**  **Postal Code**  **Country**

**RGGI COATS General Account Name**

**RGGI COATS General Account Number**

**Name of Offset Project**  **Project Commencement Date**

**Summary Description of Offset Project**

**Project City**  **Project County**  **Project State**

**Project Sponsor Organization**

**Primary Street Address**

**City**  **State/Province**  **Postal Code**  **Country**

**Brief Description of Project Sponsor Organization**

**Telephone Number**  **Website URL**

**Independent Verifier (Company/Organization)**  **States Where Verifier Accredited**

**Primary Street Address**  **Website URL**

**City**  **State/Province**  **Postal Code**  **Country**

**Point of Contact for Project**

**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. All offset projects for which the Project Sponsor or project sponsor organization has received CO<sub>2</sub> offset allowances, 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 CO<sub>2</sub> Budget Trading Program in all participating states.
2. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this *M&V Report* 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.

\_\_\_\_\_  
Signature of Project Sponsor

\_\_\_\_/\_\_\_\_/\_\_\_\_\_  
Date (MM/DD/YYYY)

\_\_\_\_\_  
Name of Project Sponsor (printed)

\_\_\_\_\_  
Title

\_\_\_\_\_  
Organization

\_\_\_\_\_  
Notary

**Offset Project Name**

**Offset Project ID Code**

**Form 1.4 – Project Sponsor Statement**

The undersigned Project Sponsor hereby confirms and attests that the offset project upon which this Monitoring and Verification Report is based is in full compliance with all of the requirements of section 22a-174-31a of the RCSA. The 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 CO<sub>2</sub> offset allowances under section 22a-174-31a of the RCSA is contingent on meeting the requirements of section 22a-174-31a of the RCSA. 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 the *Consistency Application* that was the subject of a consistency determination by the Department. The Project Sponsor understands that this right to audit shall include the right to enter the physical location of the offset project and to make available to the Department or its agent any and all documentation relating to the offset project at the Department’s request. The Project Sponsor submits to the legal jurisdiction of Connecticut.

\_\_\_\_\_  
Signature of Project Sponsor

\_\_\_\_/\_\_\_\_/\_\_\_\_\_  
Date (MM/DD/YYYY)

\_\_\_\_\_  
Name of Project Sponsor (printed)

\_\_\_\_\_  
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 *M&V Report* have been or will be reported to a voluntary or mandatory program other than the CO<sub>2</sub> Budget Trading Program.
- Greenhouse gas emissions data related to the offset project referenced in this *M&V Report* have been or will be reported to a voluntary or mandatory program other than the CO<sub>2</sub> 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
- 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 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
- 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.

**Offset Project Name**

**Offset Project ID Code**

**Form 2.1 – Demonstration of Conformance with M&V Plan**

Provide documentation that procedures and protocols specified in the M&V Plan were performed and records specified in the M&V Plan were generated and retained. Check the boxes in the tables below to indicate that the referenced documentation is provided as an attachment to Form 2.1. All attached documentation must include a header that indicates it is an attachment to Form 2.1, identifies the appropriate table number and the reference number in the left-hand column of the table, and includes the offset project name and offset project ID code.

**Table 1. SF<sub>6</sub> Inventory Management and Auditing Protocol**

Procedures and Documentation Required by the M&V Plan	Documentation Provided (check the boxes to indicate attachment of required documentation)
<b>SF<sub>6</sub> Inventory Management and Auditing Protocol</b>	
1. Procedures for records retention	<input type="checkbox"/> A list of all records retained
2. Procedures for the maintenance of cylinder-specific logs, including maintenance of a master sheet identifying all cylinders using unique identifiers, and a standardized cylinder log form	<input type="checkbox"/> Copy of master sheet identifying all cylinders <input type="checkbox"/> Copy of one representative completed standardized cylinder log form for each substation or other designated location
3. Procedures for confirming meters and scales for the filling and weighing of cylinders are consistently calibrated to manufacturer specifications	<input type="checkbox"/> Demonstration that meters and scales are consistently calibrated to manufacturer recommendations (e.g., dated receipts of calibration activities, etc.)
4. An entity-wide training plan for the inventory management team in the use of the Entity-wide SF <sub>6</sub> Inventory Tracking System as a data source, the use of the SF <sub>6</sub> mass-balance method, and recordkeeping and retention practices	<input type="checkbox"/> Copies of training records (e.g., presentations or training materials and signed attendance lists) for training in the use of the Entity-wide SF <sub>6</sub> Inventory Tracking System as a data source, the use of the SF <sub>6</sub> mass balance method, and recordkeeping and record retention practices
5. Procedures for audits of all aspects of inventory management, including all inventory tracking systems, data entry, and maintenance of cylinder logs	<input type="checkbox"/> Copies of training records (e.g., presentations or training materials and signed attendance records) for training in auditing procedures
6. A template for a report on the findings of audits including identification of needs for corrective actions that should be taken	<input type="checkbox"/> Copies of the reported findings of audits performed, including the date of audits and any corrective actions that were taken

**Offset Project Name**

**Offset Project ID Code**

**Table 2. Quality Assurance/Quality Control (QA/QC) Protocol**

Procedures and Documentation Required by the M&V Plan	Documentation Provided (check the boxes to indicate attachment of required documentation)
<b>Quality Assurance/Quality Control (QA/QC) Protocol</b>	
1. QA/QC procedures for: (i) entity-wide inventory of SF <sub>6</sub> gas procurements and disbursements; (ii) entity-wide inventory of all SF <sub>6</sub> -containing operating equipment; (iii) all cylinder logs; and (iv) emissions calculations	<input type="checkbox"/> A copy of the annual quality assurance and quality control report that describes all procedures taken to QA/QC the following in accordance with the M&V Plan: (i) entity-wide SF <sub>6</sub> gas procurements and disbursements; (ii) entity-wide inventory of all SF <sub>6</sub> -containing operating equipment; (iii) all cylinder logs; and (iv) review of emissions calculations
2. An entity-wide training plan for QA/QC officers	<input type="checkbox"/> Copies of training records (e.g., presentations or training materials and signed attendance records) for training in QA/QC procedures

**Offset Project Name**

**Offset Project ID Code**

**Form 2.2 – Determination of Emissions Reduction**

Provide the Entity-wide SF<sub>6</sub> Inventory Tracking System for the reporting year as an attachment to Form 2.2. 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. Using data from the Entity-wide SF<sub>6</sub> Inventory Tracking System, enter the requested information below:

1. Enter SF<sub>6</sub> emissions in baseline year (lbs):
2. Enter SF<sub>6</sub> emissions in reporting year (lbs):

Enter the following data (all SF<sub>6</sub> values in lbs):

- |                          |                                                        |   |                                                                                                                                                                                                                                                           |
|--------------------------|--------------------------------------------------------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>V<sub>iby</sub></b>   | <input style="width: 80%; height: 15px;" type="text"/> | = | SF <sub>6</sub> inventory in cylinders, gas carts, and other storage containers (not SF <sub>6</sub> -containing operating equipment) at the beginning of the reporting year                                                                              |
| <b>V<sub>iey</sub></b>   | <input style="width: 80%; height: 15px;" type="text"/> | = | SF <sub>6</sub> inventory in cylinders, gas carts, and other storage containers (not SF <sub>6</sub> -containing operating equipment) at the end of the reporting year                                                                                    |
|                          | <input style="width: 80%; height: 15px;" type="text"/> | = | <b>Change in SF<sub>6</sub> Inventory in cylinders, gas carts, and other storage containers (not SF<sub>6</sub>-containing operating equipment) (V<sub>iby</sub> - V<sub>iey</sub>)</b>                                                                   |
| <b>PA<sub>psd</sub></b>  | <input style="width: 80%; height: 15px;" type="text"/> | = | SF <sub>6</sub> purchased from suppliers or distributors in cylinders                                                                                                                                                                                     |
| <b>PA<sub>e</sub></b>    | <input style="width: 80%; height: 15px;" type="text"/> | = | SF <sub>6</sub> provided by equipment manufacturers with or inside SF <sub>6</sub> -containing operating equipment                                                                                                                                        |
| <b>PA<sub>rre</sub></b>  | <input style="width: 80%; height: 15px;" type="text"/> | = | SF <sub>6</sub> returned to the reporting entity after off-site recycling                                                                                                                                                                                 |
|                          | <input style="width: 80%; height: 15px;" type="text"/> | = | <b>Total Purchases/Acquisitions (PA<sub>psd</sub> + PA<sub>e</sub> + PA<sub>rre</sub>)</b>                                                                                                                                                                |
| <b>SD<sub>op</sub></b>   | <input style="width: 80%; height: 15px;" type="text"/> | = | Sales of SF <sub>6</sub> to other parties, including gas left in SF <sub>6</sub> -containing operating equipment that is sold                                                                                                                             |
| <b>SD<sub>rs</sub></b>   | <input style="width: 80%; height: 15px;" type="text"/> | = | Returns of SF <sub>6</sub> to supplier (producer or distributor)                                                                                                                                                                                          |
| <b>SD<sub>df</sub></b>   | <input style="width: 80%; height: 15px;" type="text"/> | = | SF <sub>6</sub> sent to destruction facilities                                                                                                                                                                                                            |
| <b>SD<sub>sor</sub></b>  | <input style="width: 80%; height: 15px;" type="text"/> | = | SF <sub>6</sub> sent off-site for recycling                                                                                                                                                                                                               |
|                          | <input style="width: 80%; height: 15px;" type="text"/> | = | <b>Total Sales/Disbursements (SD<sub>op</sub> + SD<sub>rs</sub> + SD<sub>df</sub> + SD<sub>sor</sub>)</b>                                                                                                                                                 |
| <b>CNP<sub>ne</sub></b>  | <input style="width: 80%; height: 15px;" type="text"/> | = | Total SF <sub>6</sub> nameplate capacity of new SF <sub>6</sub> -containing operating equipment at proper full charge                                                                                                                                     |
| <b>CNP<sub>rse</sub></b> | <input style="width: 80%; height: 15px;" type="text"/> | = | Total SF <sub>6</sub> nameplate capacity of retired SF <sub>6</sub> -containing operating equipment at proper full charge                                                                                                                                 |
|                          | <input style="width: 80%; height: 15px;" type="text"/> | = | <b>Total Change in SF<sub>6</sub> Nameplate Capacity (CNP<sub>ne</sub> - CNP<sub>rse</sub>)</b>                                                                                                                                                           |
|                          | <input style="width: 80%; height: 15px;" type="text"/> | = | <b>Total SF<sub>6</sub> Emissions [(V<sub>iby</sub> - V<sub>iey</sub>) + (PA<sub>psd</sub> + PA<sub>e</sub> + PA<sub>rre</sub>) - (SD<sub>op</sub> + SD<sub>rs</sub> + SD<sub>df</sub> + SD<sub>sor</sub>) - (CNP<sub>ne</sub> - CNP<sub>rse</sub>) ]</b> |

3. Enter emissions reduction (short tons CO<sub>2</sub>e) (emissions in reporting year (lbs) – emissions in baseline year (lbs)) X GWP of SF<sub>6</sub> (22,200)/2000:

**Offset Project Name**

**Offset Project ID Code**

**Form 3.1 – Independent Verifier Certification Statement and Report**

An accredited independent 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 this *M&V Report*, including all forms and attachments, in its entirety, including a review of the following:

1. The verifier has reviewed the entire *M&V Report* and evaluated the contents of the report in relation to the applicable requirements of section 22a-174-31a of the RCSA and the required documentation that must be provided in the *M&V Report*.
2. The verifier has evaluated the adequacy and validity of information supplied by the Project Sponsor to determine CO<sub>2</sub>-equivalent emissions reductions in accordance with subsection 22a-174-31a(e) of the RCSA, and the required documentation that must be provided in the *M&V Report*.
3. The verifier has evaluated the adequacy and consistency of methods used by the Project Sponsor to quantify, monitor, and verify CO<sub>2</sub>-equivalent emissions reductions in accordance with subsection 22a-174-31a(e) of the RCSA and the Monitoring and Verification Plan submitted as part of 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.

\_\_\_\_\_  
Signature of Verifier Representative

\_\_\_\_/\_\_\_\_/\_\_\_\_\_  
Date (MM/DD/YYYY)

\_\_\_\_\_  
Name of Verifier Representative (printed)

\_\_\_\_\_  
Title

\_\_\_\_\_  
Notary