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TITLE 250 – DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

CHAPTER 120 – AIR RESOURCES

SUBCHAPTER 05 – AIR POLLUTION CONTROL

PART 46 – CO₂ Budget Trading Program

46.1 Purpose and Authority

46.1.1 Purpose

The purpose of this regulation is to establish the Rhode Island component of the CO₂ Budget Trading Program, which is designed to-stabilize and then reduce anthropogenic emissions of CO₂, a greenhouse gas, from the CO₂ budget sources in an economically efficient manner. The Department will provide for the award of CO₂ offset allowances to sponsors of CO₂ emissions offset projects or CO₂ emissions credit retirements that have reduced or avoided atmospheric loading of CO₂, CO₂ equivalent or sequestered carbon as demonstrated in accordance with the applicable provisions of this regulation. The requirements of this regulation seek to ensure that CO₂ offset allowances awarded represent CO₂ equivalent emission reductions or carbon sequestration that are real, additional, verifiable, enforceable, and permanent within the framework of a standards based approach. Subject to the relevant compliance deduction limitations of § 46.12.5(A)(3) of this Part, CO₂ offset allowances may be used by any CO₂ budget source for compliance purposes.

46.1.2 Authority

These regulations are authorized pursuant to R.I. Gen. Laws § 42-17.1-2(s19) and R.I. Gen. Laws Chapters 23-23 and 23-82, and have been promulgated pursuant to the procedures set forth in the Rhode Island Administrative Procedures Act, R.I. Gen. Laws Chapter 42-35.

46.2 Application

The terms and provisions of this regulation shall be liberally construed to permit the Department to effectuate the purposes of state laws, goals and policies.

46.3 Severability

If any provision of this regulation or the application thereof to any person or circumstance, is held invalid by a court of competent jurisdiction, the validity of the remainder of the regulation shall not be affected thereby.

46.4 Incorporated Materials

- A. These regulations hereby adopt and incorporate 40 C.F.R. § 75; 40 C.F.R. § 75.13; 40 C.F.R. § 75.16; 40 C.F.R. § 75.19; 40 C.F.R. § 20; 40 C.F.R. § 21; 40 C.F.R. § 75.31; 40 C.F.R. § 75.64; 40 C.F.R. § 66; 40 C.F.R. § 72; 40 C.F.R. § 97 subpart AAAAA, BBBBB, CCCCC, and DDDDD; 40 C.F.R. § 52.38(a); 40 C.F.R. § 52.38(a); 40 C.F.R. § 52.38(a); 40 C.F.R. § 52.38(a); 40 C.F.R. § 52.39(a) through (k); 40 C.F.R. § 72.2; (2018) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- B. These regulations hereby adopt and incorporate the New York State Renewable

 Portfolio Standard Biomass Guidebook (2011) by reference, not including any
 further editions or amendments thereof and only to the extent that the provisions
 therein are not inconsistent with these regulations.

46.5 Definitions

- A. Unless otherwise expressly defined in this section, the terms used in this regulation shall be defined by reference to Part 0 of this Subchapter (General Definitions). As used in this regulation, the following terms shall, where the context permits, be construed as follows:
 - 1. "Account number" means the identification number given by the Department or its agent to each CO₂ Allowance Tracking System account.
 - 2. "Acid rain emissions limitation" means, as defined in 40 C.F.R. § 72.2 (2017), a limitation on emissions of sulfur dioxide or nitrogen oxides under the Acid Rain Program under Title IV of the federal Clean Air Act42 U.S.C. §§ 7651-76510 (CAA §§ 401-416), as defined in 40 C.F.R. § 72.2.
 - 3. "Acid rain program" means a multi-state sulfur dioxide and nitrogen oxides air pollution control and emission reduction program established by the Administrator under Title IV of the federal Clean Air Act 42 U.S.C. §§ 7651-76510 (CAA §§ 401-416) and 40 C.F.R. §§ 72 through 78 (2017).

- 4. "Administrator" means the Administrator of the United States Environmental Protection Agency or the Administrator's authorized representative.
- 5. "Agent" means an independent contractor, United States Environmental Protection Agency (USEPA), consumer trustee, or other entity including a regional entity.
- 6. "Allocate" or "allocation" means the determination by the Department of the number of CO₂ allowances to be recorded in the Voluntary Renewable Energy Market Set-aside Account or the Rhode Island Auction/Sale Account.
- 7. "Allocation period" means the maximum number of years for which the Department may award CO₂ offset allowances to a project for a given consistency determination pursuant to § 46.17 of this Part.
- 7. "Allocation year" means a calendar year for which the Department allocates or awards CO₂ allowances pursuant to § 46.8 and § 46.17 of this Part. The allocation year of each CO₂ allowance is reflected in the unique identification number given to the allowance pursuant to § 46.12.4(A) of this Part.
- 8. "Allowance auction" or "auction" means an auction in which the Department or its agent offers CO₂ allowances for sale.
- <u>10.</u> "Alternate CO₂ authorized account representative" means for a CO₂-budget source and each CO₂ budget unit at the source, the natural person who is authorized by the owners and operators of the source and all CO₂-budget units at the source, in accordance with § 46.9 of this Part, to represent and legally bind each owner and operator in matters pertaining to the CO₂ Budget Trading Program or, for a general account, the natural person who is authorized, under § 46.12 of this Part, to transfer or otherwise dispose of CO₂ allowances held in the general account. If the CO₂ budget source is also subject to the Acid Rain Program, then for a CO₂ Budget Trading Program compliance account, this natural person shall be the same person as the designated representative under the Acid Rain Program.
- "Anaerobic digester" means a device that promotes the decomposition of organic material to simple organics and gaseous biogas products, usually accomplished by means of controlling temperature and volume, and including a methane recovery system.

- <u>"Anaerobic digestion" means the degradation of organic material including</u> manure brought about through the action of microorganisms in the absence of elemental oxygen.
- 13. "Anaerobic storage" means storage of organic material in an oxygen-free environment, or under oxygen-free conditions, including but not limited to, holding tanks, ponds, and lagoons.
- 14. "ANSI" means American National Standards Institute.
- <u>15.</u> <u>"ASHRAE" means American Society of Heating, Refrigerating and Air-Conditioner Engineers.</u>
- 9. "Attribute" means a characteristic associated with electricity generated using a particular renewable fuel, such as its generation date, facility geographic location, unit vintage, emissions output, fuel, state program eligibility, or other characteristic that can be identified, accounted for, and tracked.
- 10. "Attribute credit" means the attributes related to one megawatt-hour of electricity generation.
- 11. "Automated data acquisition and handling system" or "DAHS" means that component of the continuous emissions monitoring system, or other emissions monitoring system approved for use under §§ 46.13 and 46.14 of this Part, which is designed to interpret and convert individual output signals from pollutant concentration monitors, flow monitors, diluent gas monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in the measurement units required by §§ 46.13 and 46.14 of this Part.
- <u>19.</u> "Award" means the determination by the Department of the number of CO₂ offset allowances to be recorded in the general account of a project sponsor pursuant to § 46.17 of this Part. Award is a type of allocation.
- 12. "Billing meter" means a measurement device used to measure electric or thermal output for commercial billing under a contract where the facility selling the electric or thermal output has different owners from the owners of the party purchasing the electric or thermal output.
- 13. "Biogas" means the gas resulting from the decomposition of organic matter under anaerobic conditions. The principle constituents of which are methane and carbon dioxide.

- 14. "Boiler" means an enclosed fossil or other fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.
- <u>23.</u> "Boiler (commercial)" means a self-contained, low pressure appliance for supplying steam or hot water to a commercial building.
- <u>24.</u> "Boiler (residential)" means a self-contained, low-pressure appliance for supplying steam or hot water to a residential building.
- 15. "British thermal unit" or "Btu" means the amount of heat required to raise the temperature of one pound of water one degree Fahrenheit.
- 26. "Building envelope" means the elements of a building that separate conditioned space from unconditioned space, or that enclose semi-heated space, through which thermal energy may be transferred to or from the exterior, unconditioned space, or conditioned space including all elements that separate the interior of a building from the outdoor environment, including walls, windows, foundation, basement slab, ceiling, roof, and insulation.
- 16. "CO₂" means carbon dioxide.
- 17. "CO₂ allowance" means a limited authorization by the Department or a participating state under the CO₂ Budget Trading Program to emit up to one ton of CO₂, subject to all applicable limitations contained in this regulation.
- 18. "CO₂ allowance deduction" or "deduct CO₂ allowances" means the permanent withdrawal of CO₂ allowances, by the Department or its agent, from a CO₂ Allowance Tracking System compliance Compliance account.

 Account to account for the number of tons of CO₂ emitted from a CO₂ budget source for a control period or an interim control period, determined in accordance with §§ 46.13 and 46.14 of this Part, or for the forfeit or retirement of CO₂ allowances as provided by this regulation.
- 19. "CO₂ allowances held" or "hold CO₂ allowances" means the CO₂ allowances, recorded by the Department or its agent, or submitted to the Department or its agent for recordation, in accordance with § 46.11 and § 46.12 of this Part, in a CO₂ Allowance Tracking System account in accordance with §§ 46.11 and 46.12 of this Part.
- 20. "CO₂ allowance tracking system" or "COATS" means the system by which the Department or its agent records allocations, deductions, and transfers of CO₂ allowances under the CO₂ Budget Trading Program. The tracking

- system may also be used to track CO₂ emissions offset projects, CO₂ allowance prices and emissions from affected sources.
- 21. "CO₂ allowance tracking system account" means an account in the CO₂ Allowance Tracking System, established by the Department or its agent, for purposes of recording the allocation, holding, transferring, or deducting of CO₂ allowances.
- 22. "CO₂ allowance transfer deadline" means midnight of the March 1 occurring after the end of the relevant control period and each relevant interim control period or, if that March 1 is not a business day, midnight of the first business day thereafter and is the deadline by which CO₂ allowances must be submitted for recordation in a CO₂ budget source's compliance account in order for the source to meet the CO₂ requirements—under § 46.7(A) of this Part, for the control period and each interim control period immediately preceding such deadline under § 46.7(A) of this Part.
- 23. "CO₂ authorized account representative" means:
 - a. -fFor a CO₂ budget source and each CO₂ budget unit at the source, the natural person who is authorized by the owners and operators of the source and all CO₂ budget units at the source to represent and legally bind each owner and operator in matters pertaining to the CO₂ Budget Trading Program, in accordance with § 46.9 of this Part, to represent and legally bind each owner and operator in matters pertaining to the CO₂ Budget Trading Program
 - b. or, for For a general account, the natural person who is authorized, under § 46.12 of this Part, to transfer or otherwise dispose of CO₂ allowances held in the general account. If the CO₂ budget source is also subject to the Acid Rain Program, CSAPR NOx Annual Trading Program, CSAPR NOx Ozone Season Trading Program, CSAPR SO₂ Group 1 Trading Program or CSAPR SO₂ Group 2 Trading Program; then for a CO₂ Budget Trading program compliance account, this natural person shall be the same person as the designated representative as defined in the respective program under the Acid Rain Program.
- 24. "CO₂ authorized alternate account representative" means:
 - a. <u>fFor a CO₂ budget source and each CO₂ budget unit at the source, the alternate natural person who is authorized by the owners and operators of the source and all CO₂ budget units at the source to represent and legally bind each owner and operator in matters</u>

pertaining to the CO2 Budget Trading Program, in accordance with § 46.9 of this Part.

- b. fFor a general account, the alternate natural person who is authorized, under § 46.12 of this Part, to transfer or otherwise dispose of CO₂ allowances held in the general account. If the CO₂ budget source is also subject to the Acid Rain Program, CSAPR NOx Annual Trading Program, CSAPR NOx Ozone Season Trading Program, CSAPR SO₂ Group 1 Trading Program or CSAPR SO₂ Group 2 Trading Program then for a CO₂ Budget Trading Program compliance account, this alternate natural person shall be the same person as the alternate designated representative as defined in the respective program.
- 25. "CO₂ budget emissions limitation" means for a CO₂ budget source, the tonnage equivalent, in CO₂ emissions, in a control period or an interim control period, of the CO₂ allowances available for compliance deduction for the CO₂ budget source for a control period or an interim control period.
- 26. "CO₂ budget permit" means the legally binding written document or portion of a 42 U.S.C. §§ 7661-7661f (CAA §§ 501-507) Title V-operating permit, issued by the Department under this regulation, to a CO₂ budget source or CO₂ budget unit that specifies the CO₂ Budget Trading Program requirements applicable to the CO₂ budget source, to each CO₂ budget unit at the CO₂ budget source, and to the owners and operators and the CO₂ authorized account representative of the CO₂ budget source and each CO₂ budget unit.
- 27. "CO₂ budget source" means a source that includes one or more CO₂ budget units.
- 28. "CO₂ Budget budget Trading trading Program means a multistate CO₂ emissions reduction program established, pursuant to this regulation and corresponding regulations in other states, as a means of reducing emissions of CO₂ from CO₂ budget sources.
- 29. "CO₂ budget unit" means a unit that is subject to the CO₂ Budget Trading Program requirements under § 46.6 of this Part.
- 30. "CO₂ cost containment reserve allowance" or "CO₂ CCR allowance" means a CO₂ allowance that is offered for sale at an auction by the Department or its agent for the purpose of containing the cost of CO₂ allowances. CO₂ CCR allowances offered for sale at an auction are separate from and additional to CO₂ allowances allocated from the Rhode

Island CO₂ Budget Trading Program base and adjusted budgets. CO₂ CCR allowances are subject to all applicable limitations contained in this regulation. Part. 17.

31. "CO₂ cost containment reserve trigger price," or "CCR trigger price" means the minimum price at which CO₂ CCR allowances are offered for sale by the Department or its agent at an auction. The CCR trigger price shall be \$10.00 per CO₂ allowance in calendar year 2017. Each calendar year thereafter, through 2020, the CCR trigger price shall be 1.025 multiplied by the CCR trigger price from the previous calendar year, rounded to the nearest whole cent. The CCR trigger price in calendar year 2021 shall be \$13.00. Each calendar year thereafter, the CCR trigger price shall be 1.07 multiplied by the CCR trigger price from the previous calendar year, rounded to the nearest whole cent, as shown in § 46.5(A)(31)(a) of this Part (Table 1).

a. Table 1

CO₂ CCR Trigger Price

2018	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>
\$10. 25	\$10. 51	\$10. 77	\$13. 00	\$13. 91	\$14. 88	\$15. 92	\$17. 03	\$18. 22	\$19. 50	<u>\$20.</u> <u>87</u>	\$22. 33	<u>\$23.</u> <u>89</u>

- 32. "CO₂ emissions containment reserve allowance" or "CO₂ ECR allowance" means a CO₂ allowance that is withheld from sale at an auction by the Department or its agent for the purpose of additional emission reduction in the event of lower than anticipated emission reduction costs.
- 33. "CO₂ emissions containment reserve trigger price", or "ECR trigger price" means the price below which CO₂ allowances will be withheld from sale by the Department or its agent at an auction. The ECR trigger price in calendar year 2021 shall be \$6.00. Each calendar year thereafter, the ECR trigger price shall be 1.07 multiplied by the ECR trigger price from the previous calendar year, rounded to the nearest whole cent, as shown in § 46.5(A)(33)(a) of this Part (Table 2).

a. Table 2

CO ₂ EC	CR Trigge	r Price							
2021	2022	2023	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	2028	2029	2030

\$ 6.00	\$ 6.42	\$ 6.87	\$ 7.35	\$ 7.86	\$ 8.41	\$ 9.00	\$ 9.63	\$10.30	\$11.02

- 42. "CO₂ equivalent" or "CO₂e" means the quantity, in tons, of a given greenhouse gas multiplied by its global warming potential
- 34. "CO₂ offset allowance" means a CO₂ allowance that is awarded to the sponsor of a CO₂ emissions offset project... pursuant to § 46.17(6) and is subject to the relevant compliance deduction limitations of § 46.12.5(A)(1) (c) of this Part.
- 35. "Combined cycle system" means a system comprised of one or more combustion turbines, heat recovery steam generators, and steam turbines configured to improve overall efficiency of electricity generation or steam production.
- 36. "Combustion turbine" means an enclosed fossil or other fuel-fired device that is comprised of a compressor (if applicable), a combustor, and a turbine, and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine.
- 37. "Commence commercial operation" means, with regard to a unit that serves a generator, to have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation. For a unit that is a CO₂ budget unit under § 46.6 of this Part, on the date the unit commences commercial operation, such date shall remain the unit's date of commencement of commercial operation even if the unit is subsequently modified, reconstructed, or repowered. For a unit that is not a CO₂ budget unit under § 46.6 of this Part, on the date the unit commences commercial operation, the date the unit becomes a CO₂ budget unit under § 46.6 of this Part, shall be the unit's date of commencement of commercial operation.
- 38. "Commence operation" means to have begun any mechanical, chemical, or electronic process, including, with regard to a unit, start-up of a unit's combustion chamber. For a unit that is a CO₂ budget unit under § 46.6 of this Part, on the date of commencement of operation, such date shall remain the unit's date of commencement of operation even if the unit is subsequently modified, reconstructed, or repowered. For a unit that is not a CO₂ budget unit under § 46.6 of this Part, on the date of commencement of operation, the date the unit becomes a CO₂ budget unit under § 46.6 of this Part, shall be the unit's date of commencement of operation.

- 48. "Commercial building" means a building to which the provisions of ANSI/ASHRAE/IESNA Standard 90.1-2007 apply, except single family homes, multifamily residential structures of three stories or fewer above grade, and manufactured homes (modular and mobile).
- 39. "Compliance account" means a CO₂ Allowance Tracking System account, established by the Department or its agent, for a CO₂ budget source under § 46.12 of this Part, in which the CO₂ allowances for the source are held and available for use by the source for a control period and each interim control period for the purpose of meeting the CO₂ requirements of § 46.7(A) of this Part.
- "Conflict of interest" means a situation that may arise with respect to an individual in relation to any specific project sponsor, CO₂ emissions offset project or category of offset projects, such that the individual's other activities or relationships with other persons or organizations render or may render the individual incapable of providing an impartial certification opinion, or otherwise compromise the individual's objectivity in performing certification functions.
- <u>"Condensing mode" means the design and operation of furnaces or boilers in a mode that leads to the production of condensate in flue gases.</u>
- 40. "Continuous emissions monitoring system" or "CEMS" means the equipment required under § 46.12 of this Part to sample, analyze, measure, and provide, by means of readings recorded at least once every fifteen (15) minutes (using an automated DAHS) and a permanent record of stack gas volumetric flow rate, stack gas moisture content, and oxygen or carbon dioxide concentration (as applicable), in a manner consistent with §§ 46.13 and 46.14 of this Part and with 40 C.F.R. § 75 -incorporated in § 46.4(A) of this Part.and § 46.13 and § 46.14 of this Part.
- 41. "Control period" means a three_-calendar-year period. The first control period is from January 1, 2009 to December 31, 2011, inclusive. Each subsequent, sequential three_-calendar_calendar_year period is a separate control period. The first two (2) calendar years of each control period are each defined as an interim control period, beginning on January 1, 2015.
- 42. "Cross state air pollution rule -NOx annual trading program" or "CSAPR

 NOx annual trading program" means -a multi-state NOx air pollution

 control and emission reduction program established in accordance with 40

 C.F.R. § 97, subpart AAAAA-incorporated in § 46.4(A) of this Part and 40

 C.F.R. § 52.38(a), incorporated in § 46.4(A) of this Part (including such a program that is revised in a SIP revision approved by the Administrator

- under 40 C.F.R. § 52.38(a)(3) or (4) incorporated in § 46.4(A) of this Partor that is established in a SIP revision approved by the Administrator under 40 C.F.R. § 52.38(a)(5) incorporated in § 46.4(A) of this Part), as a means of mitigating interstate transport of fine particulates and NOx.
- "Cross state air pollution rule NOx ozone season trading program" or "CSAPR NOx ozone season trading program" means a multi-state NOx air pollution control and emission reduction program established in accordance with 40 C.F.R. § 97, subpart BBBBB incorporated in § 46.4(A) of this Part and 40 C.F.R. § 52.38(b), incorporated in § 46.4(A) of this Part (including such a program that is revised in a SIP revision approved by the Administrator under 40 C.F.R. § 52.38(b)(3) or (4) incorporated in § 46.4(A) of this Part or that is established in a SIP revision approved by the Administrator under 40 C.F.R. §52.38(b)(5) incorporated in § 46.4(A) of this Part), as a means of mitigating interstate transport of ozone and NOx.
- "Cross state air pollution rule SO₂ Group 1 Trading Program" or "CSAPR SO₂ group 1 trading program" means a multi-state SO₂ air pollution control and emission reduction program established in accordance with 40 C.F.R. § 97, subpart CCCCC incorporated in § 46.4(A) of this Part and 40 C.F.R. § 52.39(a), (b), (d) through (f), (j), and (k), incorporated in § 46.4(A) of this Part (including such a program that is revised in a SIP revision approved by the Administrator under 40 C.F.R. § 52.39(d) or (e) incorporated in § 46.4(A) of this Part or that is established in a SIP revision approved by the Administrator under 40 C.F.R. § 52.39(f) incorporated in § 46.4(A) of this Part), as a means of mitigating interstate transport of fine particulates and SO₂.
- "Cross state air pollution rule SO₂ group 2 trading program" or "CSAPR SO₂ group 2 trading program" means a multi-state SO₂ air pollution control and emission reduction program established in accordance with 40 C.F.R. § 97, subpart DDDDD incorporated in § 46.4(A) of this Part (xxxx) and 40 C.F.R. § 52.39(a), (c), and (g) through (k), incorporated in § 46.4(A) of this Part (including such a program that is revised in a SIP revision approved by the Administrator under 40 C.F.R. § 52.39(g) or (h) incorporated in § 46.4(A) of this Part or that is established in a SIP revision approved by the Administrator under 40 C.F.R. § 52.39(i) incorporated in § 46.4(A) of this Part of this chapter), as a means of mitigating interstate transport of fine particulates and SO₂.
 - —"Cooperating regulatory agency" means a regulatory agency in a state or United States jurisdiction that is not a participating state that has entered into a memorandum of understanding with the appropriate regulatory agencies of all participating states to carry out certain obligations relative

to CO₂ emissions offset projects in that state or United States jurisdiction, including but not limited to the obligation to perform audits of offset project sites, and report noncompliance with this regulation.

- 546.5. "DAHS" means data acquisition and handling system.
- <u>-56.</u> "Department" means the Rhode Island Department of Environmental Management.
- 46. "Eligible biomass" means sustainably harvested, woody, and herbaceous fuel sources that are available on a renewable or recurring basis (excluding old-growth timber), including dedicated energy crops and trees, agricultural food and feed crop residues, aquatic plants, unadulterated wood and wood residues, animal wastes, other clean organic wastes not mixed with other solid wastes, and biogas derived from such fuel sources. Liquid biofuels do not qualify as eligible biomass. Sustainably harvested will be determined by the Department.
- 587. "Energy conservation measure" or "ECM" or "energy efficiency measure" or "EEM" means an activity or a set of activities designed to increase the energy efficiency of a building or improve the management of energy demand and may include, but not be limited to, physical changes to facility equipment, modifications to a building, revisions to operating and maintenance procedures, software changes, or new means of training or managing users of the building or operations and maintenance staff.
- <u>598.</u> "Energy performance" means a measure of the relative energy efficiency of a building, building equipment, or building components, as measured by the amount of energy required to provide building services. For building equipment and components, a relative measure of the impact of equipment or components on building energy usage.
- 6059. "Energy services" means the provision of useful services to building occupants, such as heating and hot water, cooling, and lighting.
- 47. "Excess emissions" means any tonnage of CO₂ emitted by a CO₂ budget source during a control period that exceeds the CO₂ budget emissions limitation for the source.
- 48. "Excess interim emissions" means any tonnage of CO₂ emitted by a CO₂ budget source during an interim control period multiplied by 0.50 that exceeds the CO₂ budget emissions limitation for the source.
- 49. "First control period interim-adjustment for banked allowances" means an adjustment applied to the Rhode Island CO₂ Budget Trading Program

base budget for allocation years 2014 through 2020 to address the surplus allocation year 2009, 2010, and 2011 allowances held in general and compliance accounts, including compliance accounts established pursuant to the CO₂ Budget Trading Program, but not including accounts opened by participating states.

- <u>6463.</u> "Forested offset project" means an offset project involving reforestation, improved forest management, or avoided conversion.
- 6564. "Forest offset project data report" means the report prepared by a project sponsor each year that provides the information and documentation required by this Subpart or the forest offset protocol.
- 6665. "Forest offset protocol" means the protocol titled "Regional Greenhouse Gas Initiative Offset Protocol U.S. Forest Projects", published by the participating states on June 13, 2013 (available at http://www.dem.ri.gov/rggi/pdf/revdoc13.pdf).
- 6766. "Fossil fuel" means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.
- 50. "Fossil fuel-fired" means:
 - a. With regard to a unit that commenced operation prior to January 1, 2005, the combustion of fossil fuel, alone or in combination with any other fuel, where the fossil fuel combusted comprises, or is projected to comprise, more than 50 percent (50%) of the annual heat input on a Btu basis during any year.
 - b. With regard to a unit that commenced <u>or commences</u> operation on or after January 1, 2005, the combustion of fossil fuel, alone or in combination with any other fuel, where the fossil fuel combusted comprises, or is projected to comprise, more than 5 percent <u>(5%)</u> of the annual heat input on a Btu basis during any year.
- 6968. "Furnace (residential)" means a self-contained, indirect fired appliance that supplies heated air to a residential building through ducts to conditioned spaces.
- 51. "General account" means a CO₂ Allowance Tracking System account, established under § 46.12 of this Part, that is not a compliance account.
- <u>7170.</u> "Global warming potential" or "GWP" means a measure of the radiative efficiency (heat absorbing ability) of a particular gas relative to that of carbon dioxide (CO₂) after taking into account the decay rate of each gas

- (the amount removed from the atmosphere over a given number of years)relative to that of CO₂. Global Warming Potentials used in this regulation
 are consistent with the values used in the Intergovernmental Panel on
 Climate Change, Fourth Assessment report.
- 52. "Gross generation" means the electrical output in MWe at the terminals of the generator.
- 53. "Interim control period" means a one-calendar-year time period, during each of the first and second calendar years of each three yearthree-year control period. The first interim control period starts on January 1, 2015, and ends on December 31, 2015, inclusive. The second interim control period starts on January 1, 2016, and ends on December 31, 2016, inclusive. Each successive three yearthree-year control period will have two (2) interim control periods, comprised of each of the first two (2) calendar years of that control period.
- 7473. "HVAC system" means a system or systems that provide, either collectively or individually, heating, ventilation, or air conditioning to a building, including the equipment, distribution network, and terminals.
- 75.____"Hr" means hour.
- 7674. "IESNA" means the Illuminating Engineering Society of North America.
- 7875. "Independent verifier" means an individual that has been approved by the Department or its agent to conduct verification activities with regard to CO₂ emissions offset projects.
- 7976. "Intentional reversal" means any reversal caused by a forest owner's negligence, gross negligence, or willful intent, including harvesting, development, and harm to the area within the offset project boundary.
- 80. "Lb" means pound.
- 54. "Life-of-the-unit firm power contractual arrangement" means a unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and associated energy from any specified unit and pays its proportional amount of such unit's total costs, pursuant to a contract:
 - a. For the life of the unit; or

- b. For a cumulative term of no less than <u>twenty five (25) thirty (30)</u> years, including contracts that permit an election for early termination; or
- c. For a period equal to or greater than twenty-five (25) years or seventy-70-percent for the economic useful life of the unit determined as of the time the unit is built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.
- 8278. "Market penetration rate" means a measure of the diffusion of a technology, product, or practice in a defined market, as represented by the percentage of annual sales for a product or practice, or as a percentage of the existing installed stock for a product or category of products, or as the percentage of existing installed stock that utilizes a practice.
- 8379. "Maximum design heat input" means the ability of a unit to combust a stated maximum amount of fuel per hour on a steady state basis, as determined by the physical design and physical characteristics of the unit.
- 55. "Maximum potential hourly heat input" means an hourly heat input used for reporting purposes when a unit lacks certified monitors to report heat input. If the unit intends to use of 40 C.F.R. § 75, Appendix D_incorporated in § 46.4(A) of this Part, to report heat input, this value should be calculated, in accordance with 40 C.F.R. § 75 incorporated in § 46.4(A) of this Part, using the maximum fuel flow rate and the maximum gross calorific value. If the unit intends to use a flow monitor and a diluent gas monitor, this value should be reported, in accordance with 40 C.F.R. § 75_incorporated in § 46.4(A) of this Part, using the maximum potential flowrate and either the maximum carbon dioxide concentration (in percent CO₂) or the minimum oxygen concentration (in percent O₂).
- 56. "Minimum reserve price" means the minimum reserve price in calendar year 2014 shall be \$2.00. Each calendar year thereafter, the minimum reserve price shall be 1.025 multiplied by the minimum reserve price from the previous calendar year, rounded to the nearest whole cent.
- 57. "Monitoring system" means any monitoring system that meets the requirements of § 46.13 of this Part, including a continuous emissions monitoring system, an excepted monitoring system, or an alternative monitoring system.
- 58. "Megawatt" or "MW" means a unit of power equal to 1000 kilowatts or 1,000,000 watts.

- 59. "MMBtu" means one million British thermal units.
- 60. "MWe" means megawatt electrical.
- 61. "Megawatt-hour" or "MwWhWH" means the amount of power (in megawatts) used or produced in an hour.
- 62. "Nameplate capacity" means the maximum electrical output (in MWe) that an electric generating unit can sustain over a specified period of time when not restricted by seasonal or other deratings as measured in accordance with the United States Department of Energy standards.
- 63. "Net-electric output" means the amount of gross generation the generator(s) produce (including, but not limited to, output from steam turbine(s), combustion turbine(s), and gas expander(s)), as measured at the generator terminals, less the electricity used to operate the plant (i.e., auxiliary loads); such uses include fuel handling equipment, pumps, fans, pollution control equipment, other electricity needs, and transformer losses as measured at the transmission side of the step up transformer (e.g., the point of sale).
- 9288. "Non-census water" means streams, sloughs, estuaries and canals more than one hundred and twentyone hundred twenty (120) feet and less than 1/8 of a mile wide and lakes, reservoirs and ponds one (1) to forty (40) (1 to 40) acres in size.
- 9389. "Offset project" means all equipment, materials, items, or actions directly related to the reduction of CO_2 equivalent emissions or the sequestration of carbon specified in a consistency application submitted pursuant to \$ 46.17(3) of this Part.
- 64. "Offset project" means all the equipment, materials, items, or actions directly related to the reduction of CO₂ equivalent emissions or the sequestration of carbon.
- <u>9490.</u> "On site combustion" means the combustion of fossil fuel at a building to provide heat, hot water or electricity.
- 65. "Operator" means any person who operates, controls, or supervises a CO₂ budget unit or a CO₂ budget source and shall include, but not be limited to, any holding company, utility system, or plant manager of such a unit or source.
- 66. "Owner" means any of the following persons:

- a. Any holder of any portion of the legal or equitable title in a CO₂ budget unit; or
- b. Any holder of a leasehold interest in a CO₂ budget unit, other than a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based, either directly or indirectly, upon the revenues or income from the CO₂ budget unit; or
- c. Any purchaser of power from a CO₂ budget unit under a life-of-theunit contractual arrangement in which the purchaser controls the dispatch of the unit; or
- d. With respect to any general account, any person who has an ownership interest with respect to the CO₂ allowances held in the general account and who is subject to the binding agreement for the CO₂ authorized account representative to represent that person's ownership interest with respect to the CO₂ allowances.
- 67. "Participating state" means a state that has established a corresponding regulation as part of the CO₂ Budget Trading Program.
- 9894. "Passive solar" means a combination of building design features and building components that utilize solar energy to reduce or eliminate the need for mechanical heating and cooling and daytime artificial lighting.
- 68. "Permanently retired" means a CO₂ allowance or CO₂ offset allowance that has been placed in a retirement account controlled by the jurisdiction that generated the CO₂ allowance or CO₂ offset allowance, or has been placed in an allowance retirement account controlled by the Department, or is otherwise determined by the Department to have been rendered unusable.
- 10096. "Project commencement" means for an offset project involving physical construction, other work at an offset project site, or installation of equipment or materials, the date of the beginning of such activity. For an offset project that involves the implementation of a management activity or protocol, the date on which such activity is first implemented or such protocol first utilized. For an offset project involving reforestation, improved forest management, or avoided conversion, the date specified in section 3.2 of the forest offset protocol.

- 69. "Receive" or "receipt of" means, when referring to the Department or its agent, to come into possession of a document, information, or correspondence (whether sent in writing or by authorized electronic transmission), as indicated in an official correspondence log, or by a notation made on the document, information, or correspondence, by the Department or its agent in the regular course of business.
- 70. "Recordation," "record" or "recorded" means, with regard to CO₂ allowances, the movement of CO₂ allowances or CO₂ offset allowances by the Department or its agent from one CO₂ Allowance Tracking System account to another for purposes of allocation, transfer or deduction.
- 104100. "Regional type anaerobic digester" means an anaerobic digester using feedstock from more than one agricultural operation, or importing feedstock from more than one agricultural operation. Also referred to as a "community digester" or "centralized digester."
- 71. "Renewable energy" means electricity generated from biomass, wind, solar thermal, photovoltaic, geothermal, hydroelectric facilities certified by the Low Impact Hydroelectric Institute, wave and tidal action and fuel cells powered by renewable fuels.
- 72. "Renewable portfolio standard" means a statutory or regulatory requirement that a load-serving entity provide a certain portion of the electricity it supplies to its customers from renewable energy sources, or any other statutory or regulatory requirement that a certain portion of electricity supplied to the electricity grid be generated from renewable energy sources.
- 107103. "Reporting period" means the period of time covered by a forest offset project data report. The first reporting period for an offset project in an initial crediting period may consist of six (6) to twenty four (24) (6 to 24) consecutive months; all subsequent reporting periods in an initial crediting and all reporting periods in any renewed crediting period must consist of twelve (12) consecutive months.
- 73. "Reserve price" means the minimum acceptable price for each CO₂ allowance in a specific auction. The reserve price at an auction is either the minimum reserve price or the CCR trigger price, as specified in § 46.5 of this Part.
- <u>109105.</u> "Residential building" means a low rise structure used as a single family single family home of three (3) or fewer stories above grade, or a

modular or mobile manufactured home for which the provisions of ANSI/ASHRAE/IESNA Standard 90.1 2007 do not apply.

- <u>110106.</u> "Reversal" means a GHG emission reduction or GHG removal enhancement for which CO₂-offset allowances have been issued that is subsequently released or emitted back into the atmosphere due to any intentional or unintentional circumstance.
- 74. "Rhode Island auction/sale account" means an account administered by the Department or its agent for purposes of auctioning or selling CO₂ allowances.
- 75. "Rhode Island CO₂ budget trading program adjusted budget" means the Rhode Island CO₂ Budget Trading Program adjusted budget is determined in accordance with section 5.3 of the forest offset protocol_§ 46.8.3 of this Part and is the annual amount of CO₂ tons available in Rhode Island for allocation in a given allocation year, in accordance with the CO₂ Budget Trading Program. CO₂ offset allowances allocated to project sponsors and CO₂ CCR allowances offered for sale at an auction are separate from and additional to CO₂ allowances allocated from the Rhode Island CO₂ Budget Trading Program adjusted budget.
- 76. "Rhode Island CO₂ budget trading program base budget" means the Rhode Island CO₂ Budget Trading Program base budget is specified in § 46.8.1 of this Part. CO₂ offset allowances allocated to project sponsors and CO₂ CCR allowances offered for sale at an auction are separate from and additional to CO₂ allowances allocated from the Rhode Island CO₂ Budget Trading Program Base Budget.
- 77. "Second control period interim-adjustment for banked allowances" means an adjustment applied to the Rhode Island CO₂ Budget Trading Program base budget for allocation years 2015 through 2020 to address the allocation year 2012 and 2013 allowances held in general and compliance accounts, including compliance accounts established pursuant to the CO₂ Budget Trading Program, but not including accounts opened by participating states, that are in addition to the aggregate quantity of 2012 and 2013 emissions from all CO₂ budget sources in all of the participating states.
- 78. "Serial number" means, when referring to CO₂ allowances, the unique identification number assigned to each CO₂ allowance by the Department or its agent, under § 46.12.4(C) of this Part.

- 79. "Short ton" means a measure of weight equal to two thousand (2,000) pounds or 0.9072 metric tons.
- 117113. "SF₆" means sulfur hexafluoride.
- <u>118114.</u> "SF₆-containing operating equipment" means any equipment that contains SF₆-and is used for the transmission and distribution of electricity.
- 80. "Source" means any governmental, institutional, commercial, or industrial structure, installation, plant, building, or facility that emits or has the potential to emit any air pollutant under the federal Clean Air Act(42 U.S.C. § 7401), (CAA § 502(c)). For purposes of section 502(c) of the federal Clean Air Act, a "source," including a "source" with multiple units, shall be considered a single "facility."
- <u>120116.</u> "Sponsor" or "project sponsor" means any person who meets the requirements of the CO₂ authorized account representative for the general account of an eligible CO₂ emissions offset project or CO₂ emissions credit retirement.
- 81. "State" means a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, and American Samoa and includes the Commonwealth of the Northern Mariana Islands.
- 82. "Submit" or "serve" means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation:
 - a. In person;
 - b. By United States Postal Service;
 - c. By other means of dispatch or transmission and delivery; or.
 - d. Compliance with any "submission," "service," or "mailing" deadline shall be determined by the date of dispatch, transmission, or mailing and not the date of receipt.
- 83. "Third adjustment for banked allowances" means an adjustment applied to the Rhode Island CO₂ Budget Trading Program base budget for allocation years 2021 through 2025 to address allowances held in general and compliance accounts, including compliance accounts established pursuant to the CO₂ Budget Trading Program, but not including accounts opened by participating states, that are in addition to the aggregate quantity of emissions from all CO₂ budget sources in all of the participating states at

- the end of the fourth control period in 2020 and as reflected in the CO₂ Allowance Tracking System on March 175, 2021.
- <u>123119.</u> "System benefit fund" means the monies collected directly from retail electricity or natural gas ratepayers.
- <u>1248584.</u> "Title V operating permit" means an operating permit issued under Rhode Island Air Pollution Control Regulation Part 29 of this Subchapter (Operating Permits).
- 84. "Ton" or "tonnage" means any short ton. For the purpose of determining compliance with the CO₂ requirements of § 46.7(A) of this Part, total tons for a control period and each interim control period shall be calculated as the sum of all recorded hourly emissions (or the tonnage equivalent of the recorded hourly emissions rates) in accordance with §§ 46.13 and 46.14 of this Part, with any remaining fraction of a ton equal to or greater than 0.50 ton deemed to equal one ton and any fraction of a ton less than 0.50 ton deemed to equal zero (0) tons.
- <u>126122.</u> "Total solids" means the total of all solids in a sample. They include the total suspended solids, total dissolved solids, and volatile suspended solids.
- <u>127123.</u> "Transmission and/or distribution entity" means the assets and equipment used to transmit and distribute electricity from an electric generator to the electrical load of a customer, including all related assets and equipment located within the service territory of the entity, defined asthe service territory of a load serving entity specified by the applicable state regulatory agency.
- <u>128124.</u> "Unintentional reversal" means any reversal, including wildfires or disease that is not the result of the forest owner's negligence, gross negligence, or willful intent.
- 85. <u>"Undistributed CO₂ allowances" means CO₂ allowances originally allocated to a set aside account as pursuant to § 46.8.3(K) of this Part, that were not distributed.</u>
- 86. "Unit" means a fossil fuel-fired stationary boiler, combustion turbine, or combined cycle system.
- 87. "Unit operating day" means a calendar day in which a unit combusts any fuel.

- 131127. "Undistributed CO₂ allowances" means CO₂ allowances originally allocated to a set aside account as pursuant to § 46.8.(3)(H) of this Part, that were not distributed.
- <u>13290889.</u> "Unsold CO₂ allowances" means CO₂ allowances that have been made available for sale in an auction conducted by the Department or its agent, but not sold.
- <u>133129.</u> "Verification" means the verification by an independent verifier that certain parts of a CO₂ emissions offset project consistency application or measurement, monitoring and verification report conforms to the requirements of § 46.17 of this Part.
- <u>134130.</u> "Volatile solids" means the fraction of total solids that is comprised primarily of organic matter.
- 89. "Voluntary renewable energy purchase" means a purchase of electricity from renewable energy generation or renewable energy attribute credits by a retail electricity customer on a voluntary basis. Renewable energy includes electricity generated from biomass, wind, solar thermal, photovoltaic, geothermal, hydroelectric facilities certified by the Low Impact Hydropower Institute, wave and tidal action, and fuel cells powered by renewable fuels. The renewable energy generation or renewable energy attribute credits related to such purchases may not be used by the generator or purchaser to meet any regulatory mandate, such as a renewable portfolio standard.
- 90. "Voluntary renewable energy market set-aside account" means an account established by the Department to hold CO₂ allowances that are allocated pursuant to § 46.8.3(K) of this Part.
- <u>137133.</u> "Whole building energy performance" means the overall energy performance of a building, taking into account the integrated impact on energy usage of all building components and systems.
- <u>138134.</u> "Whole-building retrofit" means any building project that involves the replacement of more than one building system, or set of building components, and also requires a building permit.
- <u>139135.</u> "Zero net energy building" means a building designed to produce as much energy, using renewable energy sources, as the building is projected to use, as measured on an annual basis.

46.6 Applicability

Any unit that, at any time on or after January 1, 2005, serves an electricity generator with a nameplate capacity equal to or greater than <u>twenty-five (25)</u> MWe shall be a CO₂ budget unit, and any source that includes one or more such units shall be a CO₂ budget source subject to the requirements of this regulation. <u>Part.</u>

46.7 General Requirements

- A. Carbon dioxide requirements
 - 1. The owners and operators of each CO₂ budget source and each CO₂ budget unit at the source shall hold CO₂ allowances available for compliance deductions, under § 46.12.5 of this Part, as of the CO₂ allowance transfer deadline, as defined in § 46.5(A)(22) of this Part, in the source's compliance account in an amount not less than the total CO₂ emissions for the control period from all CO₂ budget units at the source, less the CO₂ allowances deducted to meet the requirements, with respect to the previous interim control periods, as determined in accordance with §§ 46.12, 46.13 andthrough 46.14 of this Part.
 - 2. The owners and operators of each CO₂ budget source and each CO₂ budget unit at the source shall hold CO₂ allowances available for compliance deductions, under § 46.12.5 of this Part, as of the CO₂ allowance transfer deadline, as defined in § 46.5(A)(22) of this Part, in the source's compliance account, in an amount not less than the total CO₂ emissions, for the interim control period from all CO₂ budget units at the source multiplied by 0.50, as determined in accordance with §§ 46.12, 46.13 and through 46.14 of this Part.
 - 3. Each ton of CO₂ emitted in excess of the CO₂ budget emissions limitation for a control period shall constitute a separate violation of this regulation and applicable State law.
 - 4. Each ton of excess interim emissions shall constitute a separate violation of this regulation and applicable state law.
 - 5. A CO₂ budget unit shall be subject to the requirements under § 46.7(A)(1) of this Part starting on the later of January 1, 2009, or the date on which the unit commences operation, whichever is later.

- 6. CO₂ allowances shall be held in, deducted from, or transferred among CO₂ Allowance Tracking System accounts in accordance with §§ 46.8, 46.11, and 46.12, and § 46.17.(6) of this Part.
- 7. A CO₂ allowance shall not be deducted, in order to comply with the requirements under § 46.7(A) of this Part, for a control period or interim control period that ends prior to the year for which the CO₂ allowance was allocated. A CO₂ offset allowance shall not be deducted, in order to comply with the requirements under § 46.7(A) of this Part, beyond the applicable percent limitations set out in § 46.12.5(A)(1)(c) of this Part.
- 8. A CO₂ allowance under the CO₂ Budget Trading Program is a limited authorization by the Department or a participating state to emit one ton of CO₂ in accordance with the CO₂ Budget Trading Program. No provision of the CO₂ Budget Trading Program, the CO₂ budget permit application, the CO₂ budget permit or any provision of law shall be construed to limit the authority of the Department or a participating state to terminate or limit such authorization.
- 9. A CO₂ allowance under the CO₂ Budget Trading Program does not constitute a property right.

B. Excess emissions requirements

- 1. The owners and operators of a CO₂ budget source that has excess emissions in any control period, or excess interim emissions for any interim control period shall:
 - a. Forfeit the CO₂ allowances required for deduction under § 46.12.5(D)(1) of this Part; provided CO₂ offset allowances may not be used to cover any part of such excess emissions; and
 - b. Pay any fine, penalty, or assessment or comply with any other remedy imposed under § 46.12.5(D)(2) of this Part.

C. Recordkeeping and reporting requirements

- 1. Unless otherwise provided, the owners and operators of the CO₂ budget source and each CO₂ budget unit at the source shall keep on site at the source each of the following documents for a period of ten (10) years from the date the document is created. This period may be extended for cause, at any time prior to the end of ten (10) years, in writing by the Department.
 - a. The account certificate of representation for the CO₂ authorized account representative for the source and each CO₂ budget unit at

the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with § 46.9.5 of this Part, provided that the certificate and documents shall be retained on site at the source beyond such 10-year period until such documents are superseded because of the submission of a new account certificate of representation changing the CO₂ authorized account representative.

- b. All emissions monitoring information, in accordance with §§ 46.13 and 46.14 of this Part and 40 C.F.R. § 75.57 incorporated in § 46.4(A) of this Part.
- c. Copies of all reports, compliance certifications, and other submissions and all records made or required under the CO₂ Budget Trading Program.
- d. Copies of all documents used to complete a CO₂ budget permit application and any other submission under the CO₂ Budget Trading Program or to demonstrate compliance with the requirements of the CO₂ Budget Trading Program.
- 2. The CO₂ authorized account representative of a CO₂ budget source and each CO₂ budget unit at the source shall submit the reports and compliance certifications required under the CO₂ Budget Trading Program, including those under §§ 46.13, 46.14 and through 46.15 of this Part.

D. Monitoring requirements

1. The owners and operators, and to the extent applicable, the CO₂ authorized account representative of each CO₂ budget source and each CO₂ budget unit at the source shall comply with the monitoring requirements of §§ 46.13 and 46.14 of this Part.

E. Liability

- No permit revision shall excuse any violation of the requirements of the CO₂ Budget Trading Program that occurs prior to the date that the revision takes effect.
- 2. Any provision of the CO₂ Budget Trading Program that applies to a CO₂ budget source (including a provision applicable to the CO₂ authorized account representative of a CO₂ budget source) shall also apply to the owners and operators of such source and of the CO₂ budget units at the source.

- 3. Any provision of the CO₂ Budget Trading Program that applies to a CO₂ budget unit (including a provision applicable to the CO₂ authorized account representative of a CO₂ budget unit) shall also apply to the owners and operators of such unit.
- 4. Any person who negligently, willingly or knowingly violates any requirement or prohibition of the CO₂ Budget Trading Program or a CO₂ budget permit shall be subject to enforcement pursuant to applicable law.
- 5. Any person who negligently, willingly or knowingly makes a false material statement in any record, submission, or report under the CO₂ Budget Trading Program shall be subject to criminal enforcement pursuant to applicable law.
- 6. Each CO₂ budget source and each CO₂ budget unit shall meet the requirements of the CO₂ Budget Trading Program.

F. Effect on other authorities

1. No provision of the CO₂ Budget Trading Program, a CO₂ budget permit application, or a CO₂ budget permit, shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the CO₂ authorized account representative of a CO₂ budget source or CO₂ budget unit from compliance with any other provision of any Air Pollution Control Regulation, the Rhode Island State Implementation Plan, a federally enforceable permit, or the Clean Air Act (42 U.S.C. § 7401).

G. Computation of time

- 1. Unless otherwise stated, any time period scheduled, under the CO₂ Budget Trading Program, to begin on the occurrence of an act or event shall begin on the day the act or event occurs.
- 2. Unless otherwise stated, any time period scheduled, under the CO₂ Budget Trading Program, to begin before the occurrence of an act or event shall be computed so that the period ends the day before the act or event occurs.
- 3. Unless otherwise stated, if the final day of any time period, under the CO₂ Budget Trading Program, falls on a weekend or a State or Federal holiday, the time period shall be extended to the next business day.

H. Indemnification

1. Any and all persons subject to these regulations agree to indemnify and hold the Department harmless in the event of any dispute over their authority to submit any information to the Department and over their appointment as an authorized account representative or an alternate account representative.

46.8 CO₂ Allowance Allocations

46.8.1 Rhode Island CO₂ trading program base budget is as follows:

- A. The Rhode Island CO₂ Budget Trading Program base budget is 2,284,975 tonsfor the 2014 allocation year.
- B. The Rhode Island CO₂ Budget Trading Program base budget is 2,227,851 tonsfor the 2015 allocation year.
- C. The Rhode Island CO₂ Budget Trading Program base budget is 2,172,154 tons for the 2016 allocation year.
- D. The Rhode Island CO₂ Budget Trading Program base budget is 1,357,825 tonsfor the 2017 allocation year.
- A. The Rhode Island CO₂ Budget Trading Program base budget is 1,323,8811,512,845 ttons for the 2018 allocation year.
- B. The Rhode Island CO₂ Budget Trading Program base budget is 1,290,783 _ 2,005,354 tons for the 2019 allocation year.
- C. The Rhode Island CO₂ Budget Trading Program base budget is 1,258,514 <u>1,955,221</u>-tons for the 2020 allocation year.
- D. The Rhode Island CO₂ Budget Trading Program base budget is 1,877,683 tons for the 2021 allocation year.
- E. The Rhode Island CO₂ Budget Trading Program base budget is 1,820,783 tons for the 2022 allocation year.
- F. The Rhode Island CO₂ Budget Trading Program base budget is 1,763,884 tons for the 2023 allocation year.
- G. The Rhode Island CO₂ Budget Trading Program base budget is 1,706,986 tons for the 2024 allocation year.
- H. The Rhode Island CO₂ Budget Trading Program base budget is 1,650,085 tons for the 2025 allocation year.

- I. The Rhode Island CO₂ Budget Trading Program base budget is 1,593,186 tons for the 2026 allocation year.
- J. The Rhode Island CO₂ Budget Trading Program base budget is 1,536,286 tons for the 2027 allocation year.
- K. The Rhode Island CO₂ Budget Trading Program base budget is 1,479,387 tons for the 2028 allocation year.
- L. The Rhode Island CO₂ Budget Trading Program base budget is 1,422,488 tons for the 2029 allocation year.
- M. The Rhode Island CO₂ Budget Trading Program base budget is 1,365,588 tons for the 2030 allocation year.
- N. The Rhode Island CO₂ Budget Trading Program base budget for the 2031 allocation year and future years will be established through amendments following future program review.

46.8.2 Undistributed and unsold CO₂ allowances

- A. The Department may retire undistributed CO₂ allowances at the end of each control period.
- B. The Department may retire unsold CO₂ allowances at the end of each control period.

46.8.3 CO₂ allowance allocations

- A. The Department shall allocate to the Rhode Island Auction/Sale Account CO₂ allowances to be auctioned or sold in accordance with <u>Part 47 of this</u>
 <u>Subchapter Rhode Island Air Pollution Control Regulation Part 47 of this</u>
 <u>Subchapter</u> (CO₂ Budget Trading Program Allowance Distribution). <u>of this</u>
 <u>Subchapter</u>.
- B. CO₂ Allowances available for allocation.
 - 1. For the allocation years 20148 through 20202031, 2018 and each succeeding calendar year, the Rhode Island CO₂ Budget Trading Program adjusted budget shall be the maximum number of allowances available for allocation in a given allocation year, except for CO₂ offset allowances and CO₂ CCR allowances. In any year in which there is no adjusted budget, the adjusted budget shall equal the base budget.
- C. Cost Containment Reserve (CCR) allocation.

- 1. The Department shall allocate CO₂ CCR allowances, separate from and additional to the Rhode Island CO₂ Budget Trading Program base budget set forth in § 46.8.1 of this Part, to the Rhode Island auction account. The CCR allocation is for the purpose of containing the cost of CO₂ allowances. The Department shall allocate CO₂ CCR allowances in the following manner:
 - a. The Department shall initially allocate 80,491 CO₂ CCR allowances for calendar year 2014.
 - b. On or before January 1, 2015, and each calendar year thereafter, through 2020, the Department or its agent shall allocate CO₂ CCR allowances in an amount equal to 160,987, minus the number of CO₂ CCR allowances that remain in the Rhode Island auction account at the end of the prior calendar year.
 - c. On or before January 1, 2021, and each year thereafter, the

 Department or its agent shall allocate current vintage year CCR
 allowances equal to the quantity in § 46.8.3(C)(1)(c)((1)) of this Part
 (Table 3), and withdraw the number of CO₂ CCR allowances that
 remain in the Rhode Island auction account at the end of the prior
 calendar year:

(1) Table 3

CCR allo	wances fr	rom 2021	<u>forward</u>						
<u>2021</u>	2022	<u>2023</u>	2024	<u>2025</u>	<u>2026</u>	<u>2027</u>	2028	2029	2030
									and each year thereafte
<u>187,77</u> <u>0</u>	182,08 3	176,39 3	<u>170,70</u> <u>1</u>	165,01 <u>3</u>	159,32 1	153,63 2	<u>147,94</u> <u>1</u>	142,25 2	136,562

- D. Emissions Containment Reserve (ECR) Withholding.
 - 1. The Department or its agent shall convert and transfer any CO₂
 allowances that have been withheld from any auction(s) into the Rhode
 Island ECR account. The ECR withholding is for the purpose of additional
 emissions reduction in the event of lower than anticipated emissions

reduction costs. The Department shall withhold CO₂ ECR allowances in the following manner.

a. If the condition in § 47.11(A) of this Subchapter (CO2 Budget

Trading Program Allowance Distribution) is met at an auction, then
the maximum number of CO₂ ECR allowances that will be withheld
from that auction will be equal to the quantity shown in § 46.8.3(D)
(1)(a)((1)) of this Part (Table 4) minus the total quantity of CO₂ ECR
allowances that have been withheld from any prior auction(s) in that
calendar year. Any CO₂ ECR allowances withheld from an auction
will be transferred into the Rhode Island ECR account.

(1) Table 4

		\ 							
ECR Allo	wances f	rom 2021	<u>forward</u>						
<u>2021</u>	2022	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	2027	2028	2029	2030
									and each year thereafte r
<u>187,76</u> <u>8</u>	182,07 <u>8</u>	176,38 8	170,69 9	165,00 9	159,31 9	153,62 9	147,93 9	142,24 9	136,559

- E. First control period interimadjustment for banked allowances.
 - 1. By January 15, 2014, the Department shall determine establish the first control period interim adjustment for banked allowances quantity for allocation years 2014 through 2020 as shown in § 46.8.3(E)(1)(a) of this Part (Table 5). by the following formula:

a. Table 5

First control	period adjus	tment for ba	nked allowan	<u>ces</u>		
2014	<u>2015</u>	<u>2016</u>	2017	2018	2019	2020
132,122	132,122	132,122	132,122	132,122	132,122	132,122

FCPIABA = (FCPA/7) x RS%

	Where:									
		FCPIABA is the first control period interim adjustment for banked allowances quantity in tons.								
	FCPA, first control period adjustment, is the total quantity of allocation year 2009 2010, and 2011 CO ₂ allowances held in general and compliance accounts, including compliance accounts established pursuant to the CO ₂ Budget Trading Program, but not including accounts opened by participating states, as reflected in the CO ₂ Allowance Tracking System (COATS) on January 1, 2014.									
	RS% is re	levant RGGI st	tate's 2013 bud	dget divided by	the 2013 region	nal budget.				
	F. Second co	ontrol period in	terim- adjustme	ent for banked a	allowances.					
	 On March 17, 2014, the Department shall determine establish the second control period interim adjustment for banked allowances quantity the allocation years 2015 through 2020 as shown in § 46.8.3(F)(1)(a) of this Part (Table 6).by the following formula: Table 6 									
	Second control period adjustment for banked allowances									
	<u>2015</u>	2016	2017	2018	2019	2020				
1	220,273	220,273	220,273	220,273	220,273	220,273				

 $SCPIABA = ((SCPA - SCPE)/6) \times RS\%$

SCPIABA is the second control period interim adjustment for banked allowances quantity in tons.
 SCPA, second control period adjustment, is the total quantity of allocation year 2012 and 2013 GO₂ allowances held in general and compliance accounts, including compliance accounts established pursuant to the GO₂ Budget Trading Program, but not including accounts opened by participating states, as reflected in GOATS on March 17, 2014.

	 SCPE, second control period emissions, is the total quantity of 2012 and 2013 emissions from all CO₂ budget sources in all participating states, reported pursuant to CO₂ Budget Trading Program as reflected in COATS on March 17, 2014. RS% is Rhode Island's 2013 budget divided by the 2013 regional budget.
E.	CO ₂ Budget Trading Program adjusted budget 2014. The Department shall determine the Rhode Island CO ₂ Budget Trading Program adjusted budget for the 2014 allocation year by the following formula:
	AB = BB FCPIABA
	Where:
	AB is the Rhode Island CO ₂ Budget Trading Program 2014 adjusted budget.
	BB is the NAME Rhode Island CO ₂ Budget Trading Program 2014-base budget.
	FCPIABA is the first control period interim adjustment for banked allowances quantity.
F	CO ₂ -Budget Trading Program adjusted budgets for 2015 through 2020. On April-15, 2014April-15, 2014, the Department shall determine the Rhode Island CO ₂ -Budget Trading Program adjusted budgets for the 2015 through 2020 allocation-years by the following formula:
	AB = BB - (FCPIABA + SCPIABA)
	Where:
	AB is the Rhode Island CO ₂ Budget Trading Program adjusted budget.
	BB is the Rhode Island CO ₂ -Budget Trading Program base budget.
	FCPIABA is the first control period interim adjustment for banked allowances.

SCPIABA is the second control interim adjustment for banked allowances.

- G. Third adjustment for banked allowances.
 - 1. On March 15, 2021, the Department shall determine the third adjustment for banked allowances quantity for allocation years 2021 through 2025 through the application of the following formula:

TABA = ((TA - TAE)/5 X RS%

Where:

TABA = third adjustment for banked allowances quantity in tons. TA (third adjustment) = total quantity of allowances of vintage years prior to 2021 held in general and compliance accounts, including compliance accounts established pursuant to the CO₂ Budget Trading Program, but not including accounts opened by participating states, as reflected in the CO₂ Allowance Tracking System on March 15, 2021.

TAE (third adjustment emissions) = total quantity of 2018, 2019 and 2020 emissions from all CO_2 budget sources in all participating states, reported pursuant to CO_2 Budget Trading Program as reflected in the CO_2 Allowance Tracking System on March 15, 2021.

RS% = Relevant RGGI state's 2021 budget divided by the 2021 regional budget.

- H. CO₂ Budget Trading Program adjusted budgets for 2018 through 2020.
 - 1. On April 15, 2014, the Department established the Rhode Island CO₂
 Budget Trading Program adjusted budgets for the 2018 through 2020
 allocation years in § 46.8.3(H)(1)(a) of this Part (Table 7):
 - a. Table 7

CO ₂ Budget Trading Adjusted budgets:						
2018	2019	2020				
1,160,450	1,652,960	1,602,826				

I. CO₂ Budget Trading Program adjusted budgets for 2021 through 2025.

1. On or before April 15, 2021, the Department shall establish the Rhode Island CO₂ Budget Trading Program adjusted budgets for the 2021 through 2025 allocation years by the following formula:

AB = BB - TABA

Where:

AB = Rhode Island CO₂ Budget Trading Program adjusted budget

BB = Rhode Island CO₂ Budget Trading Program base budget

TABA = third adjustment for banked allowances quantity in tons.

- J. After making the determinations in § 46.8.3(G) of this Part, the Department or its <u>a</u>Agent will publish the CO₂ trading program adjusted budgets for the 2014-2021 through 2020-5 allocation years.
- K. Voluntary renewable energy market set-aside allocation.
 - 1. The Department shall open and manage a general account for the voluntary renewable energy market set-aside for each allocation year.
 - 2. The Department shall allocate <u>one percent (-1%)</u> of the number of allowances of the annual base budget to the voluntary renewable energy market set-aside account.
 - 3. The Department shall permanently retire CO₂ allowances from the voluntary renewable energy market set-aside account for a given allocation year. The number of allowances to be retired shall be made based on the following:
 - a. Any person may submit data to the Department or the Department may gather data documenting purchases of voluntary renewable energy that meet the requirements of § 46.8.3(K)(3)(a) of this Part this subsection by no later than the March 1 immediately following the allocation year for which it is being made and must include information to assure that the voluntary renewable energy purchase demonstrates accreditable CO₂ emissions reductions. Such data must be from reputable sources, which may include retail electricity providers, organizations that certify renewable energy products, and other parties as determined by the Department. To be considered, data must be verifiable and document the following for voluntary renewable energy purchases:

- (1) Documentation of voluntary renewable energy or renewable energy attribute credit purchases by retail customers, by customer class, in the State during the allocation year immediately preceding the application date.
- (2) Documentation that the renewable energy or renewable energy attributes related to voluntary renewable energy or renewable energy attribute credit sales was procured by the retail provider.
- (3) Time period when the retail purchase(s) was made.
- (4) State where the electricity was generated or the renewable energy attribute credit was created, including documentation of facility name, unique generator identification number, and fuel type.
- (5) Time period when the electricity was generated or the renewable energy attribute credit was created.
- b. By October 31st following the March 1st application deadline established in § 46.8.3(K)(3)(a) of this Part, the Department will determine the actual MWh of voluntary renewable energy market purchases that occurred during the allocation year. The department will retire CO₂ allowances from the voluntary renewable set-aside account in the amount up to the number of CO₂ tons represented by actual voluntary renewable energy market purchases, based on actual MWh purchases demonstrated by each applicant as follows:

 CO_2 tons = MP x EF

Where: CO_2 tons = (rounded down to the nearest whole ton) the number of allowances to be retired from the set-aside account.

MP = MWh of voluntary renewable energy purchases in the State during the allocation year.

 $EF = CO_2$ emissions factor for the control area where the electricity represented by the sale was generated.

In no event shall the department retire more than 1% of the base budget for the allocation year.

4. After retiring the CO₂ allowances from the voluntary renewable energy market set-aside account, the Department may transfer any remaining

CO₂ allowances from the set-aside account to the Rhode Island Auction/Sale Account.

46.9 CO₂ Authorized Account Representative for CO₂ Budget Sources

46.9.1 Authorization and responsibilities of the CO₂ authorized account representative

- A. Except as provided under § 46.9.2 of this Part, each CO₂ budget source, including all CO₂ budget units at the source, shall have one and only one CO₂ authorized account representative, with regard to all matters under the CO₂ Budget Trading Program concerning the source or any CO₂ budget unit at the source.
- B. The CO₂ authorized account representative of the CO₂ budget source shall be selected by an agreement binding on the owners and operators of the source and all CO₂ budget units at the source and must act in accordance with the certificate of representation under § 46.9.5 of this Part.
- C. Upon receipt, by the Department or its agent, of a complete account certificate of representation under § 46.9.5 of this Part, the CO₂ authorized account representative of the source shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the CO₂ budget source represented and each CO₂ budget unit at the source in all matters pertaining to the CO₂ Budget Trading Program, notwithstanding any agreement between the CO₂ authorized account representative and such owners and operators. The owners and operators shall be bound by any decision or order issued to the CO₂ authorized account representative by the Department or a court regarding the source or unit.
- D. No CO₂ budget permit shall be issued, and no CO₂ Allowance Tracking System account shall be established for a CO₂ budget source, until the Department or its agent has received a complete account certificate of representation under § 46.9.5 of this Part, for a CO₂ authorized account representative of the source and the CO₂ budget units at the source.
- E. Each submission under the CO₂ Budget Trading Program shall be submitted, signed, and certified by the CO₂ authorized account representative for each CO₂ budget source on behalf of which the submission is made. Each such submission shall include the following certification statement by the CO₂ authorized account representative:

- 1. "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 for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."
- F. The Department or its agent will accept or act on a submission made on behalf of owners or operators of a CO₂ budget source or a CO₂ budget unit only if the submission has been made, signed, and certified in accordance with § 46.9.1(E) of this Part.

46.9.2 Alternate CO₂ authorized alternate account representative

- A. An account certificate of representation may designate one (1) and only one (1) alternate CO₂ authorized alternate account representative who may act on behalf of the CO₂ authorized account representative. The agreement by which the alternate CO₂ authorized alternate account representative is selected shall include a procedure for authorizing the alternate CO₂ authorized alternate account representative to act in lieu of the CO₂ authorized account representative.
- B. Upon receipt by the Department or its agent of a complete account certificate of representation under § 46.9.5 of this Part, any representation, action, inaction, or submission by the alternate CO₂ authorized alternate account representative shall be deemed to be a representation, action, inaction, or submission by the CO₂ authorized account representative.
- C. Except in this section and §§ 46.9.1(A), 46.9.3, 46.9.4, 46.9.5, and 46.12.2 of this Part, whenever the term "CO₂ authorized account representative" is used in this regulation Part, the term shall be construed to include the alternate CO₂ authorized alternate account representative.

46.9.3 Changing the CO₂ authorized account representative and the alternate CO₂ authorized alternate account representative

- A. Changing the CO₂ authorized account representative.
 - The CO₂ authorized account representative may be changed at any time upon receipt, by the Department or its agent, of a superseding complete

account certificate of representation under § 46.9.5 of this Part. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous CO_2 authorized account representative or alternate CO_2 authorized alternate account representative prior to the time and date when the Department or its agent receives the superseding account certificate of representation shall be binding on the new CO_2 authorized account representative and the owners and operators of the CO_2 budget source and the CO_2 budget units at the source.

- B. Changing the alternate CO₂ authorized alternate account representative.
 - 1. The alternate CO₂ authorized alternate account representative may be changed at any time upon receipt, by the Department or its agent, of a superseding complete account certificate of representation under § 46.9.5 of this Part. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous CO₂ authorized account representative or alternate CO₂ authorized alternate account representative prior to the time and date when the Department or its agent receives the superseding account certificate of representation shall be binding on the new alternate CO₂ authorized alternate account representative and the owners and operators of the CO₂ budget source and the CO₂ budget units at the source.

46.9.4 Changes in the owners and operators

- A. In the event a new owner or operator of a CO₂ budget source or a CO₂ budget unit is not included in the list of owners and operators submitted in the account certificate of representation, such new owner or operator shall be deemed to be subject to and bound by the account certificate of representation, the representations, actions, inactions, and submissions of the CO₂ authorized account representative and any alternate CO₂ authorized alternate account representative of the source or unit, and the decisions, orders, actions, and inactions of the Department, as if the new owner or operator were included in such list.
- B. Within thirty (30) days following any change in the owners and operators of a CO₂ budget source or a CO₂ budget unit, including the addition of a new owner or operator, the CO₂ authorized account representative or alternate CO₂ authorized alternate account representative shall submit a revision to the account certificate of representation amending the list of owners and operators to include the change.

46.9.5 Account certificate of representation

- A. A complete account certificate of representation for a CO₂ authorized account representative or an alternate CO₂ authorized alternate account representative shall include the following elements in a format prescribed by the Department or its agent:
 - 1. Identification of the CO₂ budget source and each CO₂ budget unit at the source for which the account certificate of representation is submitted.
 - 2. The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of the CO₂ authorized account representative and any alternate CO₂ authorized alternate account representative.
 - 3. A list of the owners and operators of the CO₂ budget source and of each CO₂ budget unit at the source.
 - 4. The following certification statement by the CO₂ authorized account representative and any alternate CO₂ authorized alternate account representative:
 - a. "I certify that I was selected as the CO₂ authorized account representative or alternate—CO₂ authorized_alternate account representative, as applicable, by an agreement binding on the owners and operators 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 a court regarding the source or unit."
 - 5. The signature of the CO₂ authorized account representative and any alternate CO₂ authorized alternate account representative and the dates signed.
- B. Unless otherwise required by the Department or its agent, documents of agreement referred to in the account certificate of representation shall not be submitted to the Department or its agent. Neither the Department nor its agent shall be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

46.9.6 Objections concerning the CO₂ authorized account representative

- A. Once a complete account certificate of representation under § 46.9.5 of this Part, has been submitted and received, the Department and its agent will rely on the account certificate of representation unless and until the Department or its agent receives a superseding complete account certificate of representation under § 46.9.5 of this Part.
- B. Except as provided in §§ 46.9.3(A) or (B) of this Part, no objection or other communication submitted to the Department or its agent concerning the authorization, or any representation, action, inaction, or submission of the CO₂ authorized account representative shall affect any representation, action, inaction, or submission of the CO₂ authorized account representative or the finality of any decision or order by the Department or its agent under the CO₂ Budget Trading Program.
- C. The Department will not adjudicate the interest of private parties including but not limited to those concerning the authorization or any representation, action, inaction, or submission of any CO₂ authorized account representative, including private legal disputes concerning the proceeds of CO₂ allowance transfers.

46.9.7 Delegation by CO₂ authorized account representative and alternate CO₂ authorized alternate account representative

- A. A CO₂ authorized account representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Department or its agent under this regulation.
- B. An <u>alternate</u> CO₂ authorized <u>alternate</u> account representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Department or its agent under this regulation.
- C. In order to delegate authority to make an electronic submission to the Department or its agent in accordance with §§ 46.9.7(A) and (B) of this Part, the CO₂ authorized account representative or alternate CO₂ authorized alternate account representative, as appropriate, shall submit to the Department or its agent a notice of delegation, in a format prescribed by the Department that includes the following elements:
 - 1. The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of such CO₂ authorized account representative or alternate CO₂ authorized alternate account representative.
 - 2. The name, address, e-mail address, telephone number and facsimile transmission number (if any) of each such natural person, herein referred to as the "electronic submission agent".

- 3. For each such natural person, a list of the type of electronic submissions under §§ 46.9.7(A) and (B) of this Part for which authority is delegated to them.
- 4. The following certification statements by such CO₂ authorized account representative or alternate-CO₂ authorized alternate account representative:
 - a. "I agree that any electronic submission to the Department or its agent that is by a natural person identified in this notice of delegation and of a type listed for such electronic submission agent in this notice of delegation and that is made when I am a CO₂ authorized account representative or alternate CO₂ authorized alternate account representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under 250-RICR-120-05-46.9.7(D) (CO₂ Budget Trading Program) shall be deemed to be an electronic submission by me."
 - b. "Until this notice of delegation is superseded by another notice of delegation under 250-RICR-120-05-46.9.7(D) (CO₂ Budget Trading Program), I agree to maintain an e-mail account and to notify the Department or its agent immediately of any change in my e-mail address unless all delegation authority by me under 250-RICR-120-05-46.9.7 (CO₂ Budget Trading Program) is terminated."
- D. A notice of delegation, submitted under § 46.9.7(C) of this Part, shall be effective, with regard to the CO₂ authorized account representative or alternate CO₂ authorized alternate account representative identified in such notice, upon receipt of such notice, by the Department or its agent, and until receipt, by the Department or its agent, of a superseding notice of delegation by such CO₂ authorized account representative or alternate CO₂ authorized account representative as appropriate. The superseding notice of delegation may replace any previously identified electronic submission agent, add a new electronic submission agent, or eliminate entirely any delegation of authority.
- E. Any electronic submission covered by the certification in § 46.9.7(C)(4)(a) of this Part and made in accordance with a notice of delegation effective under § 46.9.7(D) of this Part shall be deemed to be an electronic submission by the CO₂ authorized account representative or alternate CO₂ authorized account representative submitting such notice of delegation.
- F. A CO₂ authorized account representative may delegate, to one or more natural persons, his or her authority to review information in the CO₂ allowance tracking system under § 46.9.7 of this Part.

- G. A CO₂ authorized alternate account representative may delegate, to one or more natural persons, his or her authority to review information in the CO₂ allowance tracking system under § 46.9.7 of this Part.
- H. In order to delegate authority to review information in the CO₂ allowance tracking system in accordance with §§ 46.9.7(F) and (G) of this Part, the CO₂ authorized account representative or CO₂ authorized alternate account representative, as appropriate, must submit, to the Department or its agent, a notice of delegation, in a format prescribed by the Department that includes the following elements:
 - 1. The name, address, e-mail address, telephone number, and facsimile transmission number of such CO₂ authorized account representative or CO₂ authorized alternate account representative;
 - The name, address, e-mail address, telephone number, and facsimile transmission number of each such natural person, herein referred to as the "reviewer";
 - 3. For each such natural person, a list of the type of information under §§ 46.9.7(F) and (G) of this Part for which authority is delegated to him or her; and
 - 4. The following certification statements by such CO₂ authorized account representative or CO₂ authorized alternate account representative;
 - a. "I agree that any information that is reviewed by a natural person identified in this notice of delegation and of a type listed for such information accessible by the reviewer in this notice of delegation and that is made when I am a CO₂ authorized account representative or CO₂ authorized alternate account representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under 250-RICR-120-05-46.9.7(I) (CO2 Budget Trading Program) shall be deemed to be a reviewer by me."
 - b. "Until this notice of delegation is superseded by another notice of delegation under 250-RICR-120-05-46.9.7(I)- (CO2 Budget Trading Program). I agree to maintain an e-mail account and to notify the Department or its agent immediately of any change in my e-mail address unless and until all delegation authority by me under 250-RICR-120-05-46.9 (CO2 Budget Trading Program) is terminated."
- I. A notice of delegation submitted under § 46.9.7(H) of this Part shall be effective, with regard to the CO₂ authorized account representative or CO₂ authorized alternate account representative identified in such notice, upon receipt of such

notice, by the Department or its agent, and until receipt, by the Department or its agent, of a superseding notice of delegation by such CO₂ authorized account representative or CO₂ authorized alternate account representative as appropriate. The superseding notice of delegation may replace any previously identified reviewer, add a new reviewer, or eliminate entirely any delegation of authority.

46.10 Permits

46.10.1 Permit requirements

- A. Each CO₂ budget permit source and each CO₂ budget unit must have a CO₂ budget permit issued under the requirements of this regulation and shall:
 - 1. Submit, to the Department, a complete CO₂ budget permit application under § 46.10.3 of this Part, in accordance with the deadline specified in § 46.10.2 of this Part; and
 - 2. Submit, in a timely manner, any supplemental information that the Department determines is necessary in order to review a CO₂ budget permit application and issue or deny a CO₂ budget permit.
- B. The owners and operators of each CO₂ budget source and each CO₂ budget unit shall operate the CO₂ budget source and CO₂ budget unit in compliance with the requirements of such CO₂ budget permit.
- C. Each CO₂ budget permit is deemed to incorporate automatically the definitions of terms under § 46.5 of this Part.

46.10.2 Submission of CO₂ budget permit applications

The CO₂ authorized account representative of any CO₂ budget source shall submit, to the Department or its agent, a complete CO₂ budget permit application under § 46.10.3 of this Part by the later of January 1, 2009, or twelve (12) months before the date on which the CO₂ budget source, or a new unit at the source, commences operation, whichever is later.

46.10.3 CO₂ budget permit applications

- A. A complete CO₂ budget permit application shall include the following elements concerning the CO₂ budget source for which the application is submitted, in a format prescribed by the Department:
- B. Identification of the CO₂ budget source, including plant name and the ORIS (Office of Regulatory Information Systems) or facility code assigned to the source

- by the Energy Information Administration of the United States Department of Energy, if applicable; and
- C. Identification of each CO₂ budget unit at the CO₂ budget source;
- D. An output monitoring plan that meets the requirements in § 46.14.7(C) of this Part; and
- E. Any other information requested by the Department.

46.10.4 CO₂ budget permit revisions

If the CO₂ budget source is required to have a 42 U.S.C. §§ 7661-7661f (CAA §§ 501-507) title V)-operating permit under Part 29 of this Subchapter Rhode Island Air Pollution Control Regulation Part 29 of this Subchapter (Operating Permits), the CO₂ budget portion of the 42 U.S.C. §§ 7661-7661f (CAA §§ 501-507) title V operating permit shall be modified in accordance with the procedures in Part 29 of this Subchapter (Operating Permits).

B. If the CO₂ budget source is not required to have a title V operating permit under Rhode Island Air Pollution Control Regulation Part 29 of this Subchapter (Operating Permits), the CO₂ budget permit shall be modified in accordance with the procedures in the regulation.

46.10.5 Duty to reapply

- A. For a CO₂ budget source required to have a 42 U.S.C. §§ 7661-7661f (CAA §§ 501-507)title V operating permit, the CO₂ authorized account representative shall submit a complete CO₂ budget permit application under § 46.10.(3) of this Part, for the CO₂ budget source covering the CO₂ budget units at the source in accordance with the provisions of Part 29 of this Subchapter Rhode Island Air-Pollution Control Regulation 29 Part 29 of this Subchapter (Operating Permits) addressing permit renewals.
- B. For a CO₂ budget source not required to have a <u>42 U.S.C.</u> §§ <u>7661-7661f</u> (CAA §§ <u>501-507</u>title V-) operating permit, the CO₂ authorized account representative shall submit a complete CO₂ budget permit application under § 46.10(<u>.</u>3 of this Part.) for the CO₂ budget source covering the CO₂ budget units at the source in accordance with the provisions of Rhode Island Air Pollution Control Regulation Part 29 of this Subchapter Part 29 of this Subchapter (Operating Permits) addressing permit renewals.

46.11CO₂ Allowance Transfers

46.11.1 Submission of CO₂ allowance transfers

- A. The CO₂ authorized account representatives seeking recordation of a CO₂ allowance transfer shall submit the transfer to the Department or its agent. To be considered correctly submitted, the CO₂ allowance transfer shall include the following elements in a format specified by the Department or its agent:
 - 1. The bBoth the transferor and transferee accounts;
 - 2. A specification by serial number of each CO₂ allowance to be transferred;
 - 3. The printed name and signature of the CO₂ authorized account representative of the transferor account and the date signed;
 - 4. The date of the completion of the last sale or purchase transaction for the allowance, if any; and
 - 5. The purchase or sale price of the allowance that is the subject of a sale or purchase transaction under § 46.11.1(A)(4) of this Part.

46.11.2 Recordation

- A. Within <u>five</u> (5) business days of receiving a CO₂ allowance transfer, except as provided in § 46.11.2(B) of this Part, the Department or its agent will record a CO₂ allowance transfer by moving each CO₂ allowance from the transferor account to the transferee account as specified by the request, provided that:
 - 1. The transfer is correctly submitted under § 46.11.1 of this Part;
 - 2. The transferor account includes each CO₂ allowance identified by serial number in the transfer; and
 - 3. The transfer meets all other requirements of this regulation.
- B. A CO₂ allowance transfer into or out of a compliance account that is submitted for recordation following the CO₂ allowance transfer deadline, as defined in § 46.5(A)(22) of this Part, and that includes any CO₂ allowances that are of allocation years that fall within a control period or interim control period prior to or the same as the control period or interim control period to which the CO₂ allowance transfer deadline applies will not be recorded until after completion of the process pursuant to § 46.12.5(B) of this Part.
- C. Where a CO₂ allowance transfer submitted for recordation fails to meet the requirements of § 46.11.2(A) of this Part, the Department or its agent will not record such transfer.

46.11.3 Notification

- A. Notification of recordation.
 - 1. Within five (5) business days of recordation of a CO₂ allowance transfer under § 46.11(<u>.</u>2), the The Department or its agent will notify each party to the transfer within five (5) business days of recordation of a CO₂ allowance transfer under § 46.11.2 of this Part. Notice will be given to the CO₂ authorized account representatives of both the transferor and transferee accounts.
- B. Notification of non-recordation.
 - 1. Within ten (10) business days of receipt of a CO₂ allowance transfer that fails to meet the requirements of § 46.11(.2)(A) of this Part, the The Department or its agent will notify the CO₂ authorized account representatives of both accounts subject to the transfer of the following of within ten (10) business days of receipt of a CO₂ allowance transfer that fails to meet the requirements of § 46.11.2(A) of this Part:
 - a. A decision not to record the transfer, and
 - b. The reasons for such non-recordation.
- C. Nothing in this section shall preclude the submission of a CO₂ allowance transfer for recordation following notification of non-recordation. All submissions of CO₂ allowances following notification of non-recordation are subject to the provisions of § 46.11 of this Part.

46.12CO₂ Allowance Tracking System

46.12.1 CO₂ Allowance Tracking System accounts

- A. Nature and function of compliance accounts.
 - Consistent with § 46.12.2(A) of this Part, the Department or its agent will establish one compliance account for each CO₂ budget source.
 Deductions or transfers of CO₂ allowances pursuant to §§ 46.11, 46.12.5, 46.12.7, or 46.15.2 of this Part will be recorded in the compliance accounts in accordance with § 46.12 of this Part.
- B. Nature and function of general accounts.
 - 1. Consistent with § 46.12.2(B) of this Part, the Department or its agent will establish, upon request, a general account for any person. Transfers of CO₂ allowances pursuant to § 46.11 of this Part, will be recorded in the general account in accordance with § 46.11 of this Part.

46.12.2 Establishment of accounts

A. Compliance accounts.

1. Upon receipt of a complete account certificate of representation under § 46.9.5 of this Part, the Department or its agent will establish a compliance account for each CO₂ budget source for which the account certificate of representation was submitted.

B. General accounts.

- 1. Application for general account.
 - a. Any person may apply to open a general account for the purpose of holding and transferring CO₂ allowances. An application for a general account may designate one, and only one, CO₂ authorized account representative and one, and only one, alternate CO₂ authorized alternate account representative who may act on behalf of the CO₂ authorized account representative. The agreement by which the alternate CO₂ authorized alternate account representative is selected shall include a procedure for authorizing the alternate CO₂ authorized alternate account representative to act in lieu of the CO₂ authorized account representative. A complete application for a general account shall be submitted to the Department or its agent and shall include the following elements in a format prescribed by the Department or its agent:
 - (1) Name, mailing address, e-mail address, telephone number, and facsimile transmission number (if any) of the CO₂ authorized account representative and any alternate CO₂ authorized alternate account representative;
 - (2) At the option of the CO₂ authorized account representative, organization name and type of organization;
 - (3) A list of all persons subject to a binding agreement for the CO₂ authorized account representative or any alternate-CO₂ authorized alternate account representative to represent their ownership interest with respect to the CO₂ allowances held in the general account;
 - (4) The following certification statement by the CO₂ authorized account representative and any alternate CO₂ authorized_alternate account representative:

- (AA) "I certify that I was selected as the CO₂ authorized account representative or the CO₂ alternate authorized alternate account representative, as applicable, 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 such persons and that each such 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."
- (5) The signature of the CO₂ authorized account representative and any alternate CO₂ authorized alternate account representative and the dates signed; and
- (6) Unless otherwise required by the Department or its agent, documents of agreement referred to in the application for a general account shall not be submitted to the Department or its agent. Neither the Department nor its agent shall be under any obligation to review or evaluate the sufficiency of such documents, if submitted.
- 2. Authorization of CO₂ authorized account representative.
 - a. Upon receipt by the Department or its agent of a complete application for a general account under § 46.12.2(B)(1) of this Part:
 - (1) The Department or its agent will establish a general account for the person or persons for whom the application is submitted.
 - (2) The CO₂ authorized account representative and any alternate CO₂ authorized alternate account representative for the general account shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each person who has an ownership interest with respect to CO₂ allowances held in the general account in all matters pertaining to the CO₂ Budget Trading Program, notwithstanding any agreement between the CO₂ authorized account representative or any alternate CO₂ authorized

<u>alternate</u> account representative and such person. Any such person shall be bound by any order or decision issued to the CO₂ authorized account representative or any <u>alternate</u> CO₂ authorized <u>alternate</u> account representative by the Department or its agent or a court regarding the general account.

- (3) Any representation, action, inaction, or submission by any alternate CO₂ authorized alternate account representative shall be deemed to be a representation, action, inaction, or submission by the CO₂ authorized account representative.
- b. Each submission concerning the general account shall be submitted, signed, and certified by the CO₂ authorized account representative or any alternate CO₂ authorized alternate account representative for the persons having an ownership interest with respect to CO₂ allowances held in the general account. Each such submission shall include the following certification statement by the CO₂ authorized account representative or any alternate CO₂ authorized alternate account representative:
 - (1) "I am authorized to make this submission on behalf of the persons having an ownership interest with respect to the CO₂ allowances held in the general account. 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 for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."
- c. The Department or its agent will accept or act on a submission concerning the general account only if the submission has been made, signed, and certified in accordance with-_§ 46.12_(2)(B)(2)(b) of this Part.
- 3. Changing CO₂ authorized account representative and alternate CO₂ authorized alternate account representative; changes in persons with ownership interest.

- a. The CO₂ authorized account representative for a general account may be changed at any time upon receipt, by the Department or its agent, of a superseding complete application for a general account under § 46.12.2(B)(1) of this Part. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous CO₂ authorized account representative, or the previous alternate CO₂ authorized alternate account representative, prior to the time and date when the Department or its agent receives the superseding application for a general account shall be binding on the new CO₂ authorized account representative and the persons with an ownership interest with respect to the CO₂ allowances in the general account.
- b. The alternate CO₂ authorized alternate account representative for a general account may be changed at any time upon receipt by the Department or its agent of a superseding complete application for a general account under § 46.12.2(B)(1) of this Part. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous CO₂ authorized account representative, or the previous alternate CO₂ authorized alternate account representative prior to the time and date when the Department or its agent receives the superseding application for a general account shall be binding on the new alternate CO₂ authorized alternate account representative and the persons with an ownership interest with respect to the CO₂ allowances in the general account.
- c. In the event a new person having an ownership interest with respect to CO₂ allowances in the general account is not included in the list of such persons in the application for a general account, such new person shall be deemed to be subject to and bound by the application for a general account, the representations, actions, inactions, and submissions of the CO₂ authorized account representative and any alternate CO₂ authorized alternate account representative, and the decisions, orders, actions, and inactions of the Department or its agent, as if the new person were included in such list.
- d. Within thirty (30) days following any change in the persons having an ownership interest with respect to CO₂ allowances in the general account, including the addition or deletion of persons, the CO₂ authorized account representative or any alternate CO₂ authorized alternate account representative shall submit a revision to the application for a general account amending the list of persons

having an ownership interest with respect to the CO₂ allowances in the general account to include the change.

- 4. Objections concerning CO₂ authorized account representative.
 - a. Once a complete application for a general account under § 46.12.2(B)(1) of this Part has been submitted and received, the Department or its agent will rely on the application unless and until a superseding complete application for a general account under § 46.12.2(B)(1) of this Part is received by the Department or its agent.
 - b. Except as provided in §§ 46.12.2(B)(3)(a) and (b) of this Part, no objection or other communication submitted to the Department or its agent concerning the authorization, or any representation, action, inaction, or submission of the CO₂ authorized account representative or any alternate CO₂ authorized alternate account representative for a general account shall affect any representation, action, inaction, or submission of the CO₂ authorized account representative or any alternate CO₂ authorized alternate account representative or the finality of any decision or order by the Department or its agent under the CO₂ Budget Trading Program.
 - c. Neither the Department nor its agent will adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of the CO₂ authorized account representative or any alternate CO₂ authorized alternate account representative for a general account, including private legal disputes concerning the proceeds of CO₂ allowance transfers.
- 5. Delegation by CO₂ authorized account representative and alternate CO₂ authorized alternate account representative.
 - a. A CO₂ authorized account representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Department or its agent provided for under §§ 46.11 and 46.12 of this Part.
 - b. An <u>alternate</u> CO₂ authorized <u>alternate</u> account representative may delegate, to one or more natural person, his or her authority to make an electronic submission to the Department or its agent provided for under §§ 46.11 and 46.12 of this Part.
 - c. In order to delegate authority to make an electronic submission to the Department or its agent in accordance with §§ 46.12.2(B)(5)(a)

- and (b) of this Part, the CO₂ authorized account representative or alternate CO₂ authorized alternate account representative, as appropriate, must submit, to the Department or its agent, a notice of delegation, in a format prescribed by the Department that includes the following elements:
- (1) The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of such CO₂ authorized account representative or alternate CO₂ authorized alternate account representative;
- (2) The name, address, e-mail address, telephone number and facsimile transmission number (if any) of each such natural person, herein referred to as "electronic submission agent";
- (3) For each such natural person, a list of the type of electronic submissions under §§ 46.12.2(A) or (B) of this Part for which authority is delegated to them; and
- (4) The following certification statements by such CO₂ authorized account representative or alternate CO₂ authorized alternate account representative:
 - (AA) "I agree that any electronic submission to the Department or its agent that is by a natural person identified in this notice of delegation and of a type listed for such electronic submission agent in this notice of delegation and that is made when I am a CO₂ authorized account representative or alternate CO₂ authorized alternate account representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under \$250-RICR-120-05-46.12.2(B)(5)(d) (CO2 Budget Trading Program) shall be deemed to be an electronic submission by me."
 - (BB) "Until this notice of delegation is superseded by another notice of delegation under 250-RICR-120-05-46.12.2(B)(5)(d) (CO2 Budget Trading Program), I agree to maintain an e-mail account and to notify the Department or its agent immediately of any change in my e-mail address unless all delegation authority by me under 250-RICR-120-05-46.12.2(B)(5) (CO2 Budget Trading Program) is terminated."

- d. A notice of delegation submitted under § 46.12.2(B)(5)(c) of this Part shall be effective, with regard to the CO₂ authorized account representative or alternate CO₂ authorized alternate account representative identified in such notice, upon receipt of such notice by the Department or its agent and until receipt by the Department or its agent of a superseding notice of delegation by such CO₂ authorized account representative or alternate CO₂ authorized alternate account representative as appropriate. The superseding notice of delegation may replace any previously identified electronic submission agent, add a new electronic submission agent, or eliminate entirely any delegation of authority.
- e. Any electronic submission covered by the certification in § 46.12.2(B)(5)(c)((4))(AA) of this Part and made in accordance with a notice of delegation effective under § 46.12.2(B)(5)(d) of this Part shall be deemed to be an electronic submission by the CO₂ authorized account representative or alternate CO₂ authorized alternate account representative submitting such notice of delegation.

C. Account identification.

1. The Department or its agent will assign a unique identifying number to each account established under §§ 46.12.2(A) or (B) of this Part.

46.12.3 CO₂ Allowance Tracking System responsibilities of CO₂ authorized account representative

Following the establishment of a CO₂ Allowance Tracking System account, all submissions to the Department or its agent pertaining to the account, including, but not limited to, submissions concerning the deduction or transfer of CO₂ allowances in the account, shall be made only by the CO₂ authorized account representative for the account.

46.12.4 Recordation of CO₂ allowance allocations

- A. By January 1 of each calendar year, 2009, the Department or its agent will record in the Rhode Island Auction/Sale Account, the CO₂ allowances allocated for auction/sale in that year. for allocation years of 2009, 2010, 2011, and 2012.
- B. By January 1 of each calendar, 201 year 0, and each January thereafter, the Department or its agent will record in the Rhode Island Auction/ Sale Account the CO₂ allowances for the allocation year three (3) years in the future.

- C. By January 1 of each calendar year, 2009, the Department or its agent will record in the Voluntary Renewable Energy Market Set aside Account the CO₂-allowances for allocation years of 2009, 2010, 2011, and 2012.
- B. By January 1 of each calendar year, 2010, and each January thereafter, the Department or its agent will record in the Voluntary Renewable Energy Market Set-aside Account, the CO₂ allowances allocated for the Voluntary Renewable Energy Market Set-aside in that year for the allocation year three (3) years in the future.
- C. Serial numbers for allocated CO₂ allowances.
 - 1. When allocating CO₂ allowances to and recording them in an account, the Department or its agent will assign each CO₂ allowance a unique identification number that will include digits identifying the year for which the CO₂ allowance is allocated.

46.12.5 Compliance

- A. Allowances available for compliance deduction.
 - 1. CO₂ allowances that meet the following criteria are available to be deducted in order for a CO₂ budget source to comply with the CO₂ requirements of § 46.7(A) of this Part, for a control period or an interim control period of § 46.7(A) of this Part.
 - a. The CO₂ allowances, other than CO₂ offset allowances, are of allocation years that fall within a prior control period, the same control period, or the same interim control period for which the allowances will be deducted.
 - b. The CO₂ allowances are held in the CO₂ budget source's compliance account as of the CO₂ allowance transfer deadline, as defined in § 46.5(A)(22) of this Part, for that control period or interim control period are transferred into the compliance account by a CO₂ allowance transfer correctly submitted for recordation under § 46.11.1 of this Part, by the CO₂ allowance transfer deadline for that control period or interim control period.
 - c. For CO₂ offset allowances, the number of CO₂ offset allowances that are available to be deducted in order for a CO₂ budget source to comply with the CO₂ requirements of § 46.7(A) of this Part, for a control period or interim control period may not exceed 3.3 percent (3.3%) of the CO₂ budget source's CO₂ emissions for that control period, or ef-3.3 percent of 0.50 times the CO₂ budget source's

- CO₂ emissions for an interim control period, as determined in accordance with §§ 46.12, 46.13, and through 46.14 of this Part.
- d. The CO₂ allowances are not necessary for deductions for excess emissions for a prior control period under § $46.12 \pm (5)$ (D) of this Part.

B. Deductions for compliance.

- 1. Following the recordation, in accordance with § 46.11.2 of this Part, of CO₂ allowance transfers submitted for recordation in the CO₂ budget source's compliance account by the CO₂ allowance transfer deadline for a control period, or interim control period, the Department or its agent will deduct CO₂ allowances available under § 46.12.5(A)(1) of this Part to cover the source's CO₂ emissions (as determined in accordance with §§ 46.13 and 46.14 of this Part) for the control period, or interim control period as follows:
 - a. Until the amount of CO₂ allowances deducted equals the number of tons of total CO₂ emissions (or 0.50 times the number of tons of total CO₂ emissions for an interim control period), less any CO₂ emissions attributable to the burning of eligible biomass, determined in accordance with §§ 46.13 and 46.14 of this Part, from all CO₂ budget units at the CO₂ budget source for the control period or interim control period; or
 - b. If there are insufficient CO₂ allowances to complete the deductions in § 46.12.5(B)(1) of this Part, until no more CO₂ allowances available under § 46.12.5(B)(1)(a) of this Part remain in the compliance account.
- C. Identification of available CO₂ allowances by serial number; default compliance deductions.
 - 1. The CO₂ authorized account representative for a source's compliance account may request that specific CO₂ allowances, identified by serial number, in the compliance account be deducted for emissions or excess emissions for a control period or interim control period in accordance with §§ 46.12.5(B) or (D) of this Part. Such identification shall be made in the compliance certification report submitted in accordance with § 46.15.1 of this Part.
 - 2. <u>In the absence of an identification or in the case of a partial identification of available CO2 allowances by serial number.</u> The the Department or its agent will deduct CO₂ allowances, for a control period or interim control

period, from the CO₂ budget source's compliance account, in the absence of an identification or in the case of a partial identification of available CO₂-allowances by serial number under § 46.12.5(C)(1) of this Part, in the following order:

- a. First, subject relevant compliance deduction limitations under §§ 46.12.5(A)(1)(c) and 46.12.5(D)(1) of this Part, CO₂ offset allowances. CO₂ offset allowances shall be deducted in chronological order (i.e., CO₂ offset allowances from earlier allocation years shall be deducted before CO₂ offset allowances from later allocation years). In the event that some, but not all, CO₂ offset allowances from a particular allocation year are to be deducted, CO₂ offset allowances shall be deducted by serial number, with lower serial number allowances deducted before higher serial number allowances.
- b. Second, any CO₂ allowances, other than CO₂ offset allowances that are available for deduction under § 46.12.5(A)(1) of this Part, CO₂ allowances shall be deducted in chronological order (i.e., CO₂ allowances from earlier allocation years shall be deducted before CO₂ allowances from later allocation years). In the event that some, but not all, CO₂ allowances from a particular allocation year are to be deducted, CO₂ allowances shall be deducted by serial number, with lower serial number allowances deducted before higher serial number allowances.

D. Deductions for excess emissions.

- 1. After making the deductions for compliance under § 46.12.5(B) of this Part, the Department or its agent will deduct, from the CO₂ budget source's compliance account, a number of CO₂ allowances, from allocation years that occur after the control period in which the source has excess emissions, equal to three (3) times the number of the source's excess emissions. In the event that a source has insufficient CO₂ allowances to cover three (3) times the number of the source's excess emissions, the source shall be required to immediately transfer sufficient allowances into its compliance account. No CO₂ offset allowances may be deducted to account for the source's excess emissions.
- 2. Any CO₂ allowance deduction required under § 46.12.5(D)(1) of this Part shall not affect the liability of the owners and operators of the CO₂ budget source or the CO₂ units at the source for any fine, penalty, or assessment, or their obligation to comply with any other remedy, for the same violation,

as ordered under applicable State law. The following guidelines will be followed in assessing fines, penalties or other obligations:

- a. For purposes of determining the number of days of violation, if a CO₂ budget source has excess emissions for a control period, each day in the control period constitutes a day in violation unless the owners and operators of the unit demonstrate that a lesser number of days should be considered. The Department or its agent will have complete discretion to determine if the owner or operator of the unit demonstrated that a lesser number of days should be used.
- b. Each ton of excess emissions is a separate violation.
- c. For purposes of determining the number of days of violation, if a CO₂ budget source has excess interim emissions for an interim control period, each day in the interim control period constitutes a day in violation unless the owners and operators of the unit demonstrate that a lesser number of days should be considered.
- d. Each ton of excess interim emissions is a separate violation.
- 3. The propriety of the Department's determination that a CO₂ budget source had excess emissions and the associated deduction of CO₂ allowances from that CO₂ budget source's account may be later challenged in the context of an administrative enforcement, or any civil or criminal judicial action arising from or encompassing that excess emissions violation. The commencement or pendency of any administrative enforcement, or civil or criminal judicial action arising from or encompassing that excess emissions violation will not act to prevent the Department or its agent from initially deducting the CO₂ allowances resulting from the Department's original determination that the relevant CO₂ budget source has had excess emissions. Should the Department's determination of the existence or extent of the CO₂ budget source's excess emissions be revised either by a settlement or final conclusion of any administrative or judicial action, the Department shall:
 - a. In any instance where the Department's determination of the extent of excess emissions was too low, the Department will take further action under §§ 46.12.5(D)(1) and (2) of this Part to address the expanded violation.
 - b. In any instance where the Department's determination of the extent of excess emissions was too high, the Department will distribute to the relevant CO₂ budget source a number of CO₂ allowances

equaling the number of CO₂ allowances deducted which are attributable to the difference between the original and final quantity of excess emissions. Should such CO₂ budget source's compliance account no longer exist, the CO₂ allowances will be provided to a general account selected by the owner or operator of the CO₂ budget source.

- E. The Department will record, in the appropriate compliance account, all deductions from such an account pursuant to §§ 46.12.5(B) and (D) of this Part.
- F. Action by the Department on submissions.
 - 1. The Department may review and conduct independent audits concerning any submission under the CO₂ Budget Trading Program and make appropriate adjustments of the information in the submissions.
 - 2. The Department may deduct CO₂ allowances from or transfer CO₂ allowances to a source's compliance account based on information in the submissions, as adjusted under § 46.12.5(F)(1) of this Part.

46.12.6 **Banking**

Each CO₂ allowance that is held in a compliance account or a general account will remain in such account unless and until the CO₂ allowance is deducted or transferred under §§ 46.11, 46.12.5, 46.12.7, or 46.15.2 of this Part.

46.12.7 Account error

The Department or its agent may, at its sole discretion and on his or her own motion, correct any error in any CO₂ Allowance Tracking System account. Within ten (10) business days of making such correction, the Department or its agent will notify the CO₂ authorized account representative for the account.

46.12.8 Closing of general accounts

- A. A CO₂ authorized account representative of a general account may instruct the Department or its agent to close the account by submitting a statement requesting deletion of the account from the CO₂ Allowance Tracking System and by correctly submitting for recordation under § 46.11.1 of this Part, a CO₂ allowance transfer of all CO₂ allowances in the account to one or more other CO₂ Allowance Tracking System accounts.
- B. If a general account shows no activity for a period of one (1) year-six (6) years or more and does not contain any CO₂ allowances, the Department or its agent may notify the CO₂ authorized account representative for the account that the account

will be closed in the CO₂ Allowance Tracking System twenty (20) thirty (30) business days after the notice is sent. The account will be closed after the thirtytwenty (20)(30) day period unless, before the end of the twenty (20) thirty (30) day period, the Department or its agent receives a correctly submitted transfer of CO₂ allowances into the account under § 46.11.1 of this Part, or a statement submitted by the CO₂ authorized account representative demonstrating, to the satisfaction of the Department or its agent, good cause as to why the account should not be closed. The Department or its agent will have sole discretion to determine if the owner or operator of the unit demonstrated that the account should not be closed.

46.13 Monitoring

46.13.1 Monitoring requirements

- A. The owners and operators, and to the extent applicable, the CO₂ authorized account representative of a CO₂ budget unit, shall comply with the monitoring requirements as provided in this subsection and all applicable sections of 40_ C.F.R. § 75 incorporated in § 46.4(A) of this Part. Where referenced in §§ 46.13 and 46.14 of this Part, the monitoring requirements of 40 C.F.R. § 75 incorporated in § 46.4(A) of this Part shall be adhered to in a manner consistent with the purpose of monitoring and reporting CO₂ mass emissions pursuant to this regulation. For purposes of complying with such requirements, the definitions in § 46.5 of this Part and in 40 C.F.R. § 72.2 incorporated in § 46.4(A) of this Part, shall apply, and the terms "affected unit", "designated representative", and "continuous emissions monitoring system" or "CEMS" (or "CEMS") in 40 C.F.R. § 75-(2017)incorporated in § 46.4(A) of this Part shall be replaced by the terms "CO2 budget unit," "CO2 authorized account representative," and "continuous emissions monitoring system or "CEMS" (or "CEMS"), respectively, as defined in §§ 46.5(A)(29), (23), and (40) of this Part. For units not subject to an Acid Rain emissions limitation, the term "Administrator" in 40 C.F.R. § 75 (2017)incorporated in § 46.4(A) of this Part shall be replaced with "the Department or its agent". Owners or operators of a CO₂ budget unit who monitor a unit that is not a CO₂ budget unit pursuant to the common, multiple, or bypass stack procedures in 40 C.F.R. § 75.72(b)(2)(ii) incorporated in § 46.4(A) of this Part, or 40 C.F.R. § 75.16(b)(2)(ii)(B) incorporated in § 46.4(A) of this Part, as pursuant to 40 C.F.R. § 75.13 incorporated in § 46.4(A) of this Part, for purposes of complying with this regulation shall monitor and report CO₂ mass emissions from such unit that is not a CO₂ budget units according to the procedures for CO₂ budget units established in §§ 46.13 and 46.14 of this Part.
- B. The emissions measurements recorded and reported in accordance with this section shall be used to determine compliance by the unit with the CO₂ requirements of § 46.7(A) of this Part.

46.13.2 General requirements

- A. Requirements for installation, certification, and data accounting.
 - 1. The owner or operator of each CO₂ budget unit shall meet the following requirements.
 - a. Install all monitoring systems necessary to monitor CO₂ mass emissions in accordance with 40 C.F.R. § 75 incorporated in § 46.4(A) of this Part, except for equation G-1. Equation G-1 in Appendix G shall not be used to determine CO₂ emissions under this section. This may require systems to monitor CO₂ concentration, stack gas flow rate, O₂ concentration, heat input, and fuel flow rate.
 - b. Successfully complete all certification tests required under § 46.13.3 of this Part and meet all other requirements of § 46.13.2 of this Partthis section and 40 C.F.R. § 75, incorporated in § 46.4(A) of this Part, applicable to the monitoring systems under § 46.13.2(A)(1)(a) of this Part.
 - c. Record, report and quality-assure the data from the monitoring systems under § 46.13.2(A)(1)(a) of this Part.

B. Compliance dates.

- 1. The owner or operator of a CO₂ budget unit shall meet the monitoring system certification and other requirements of § 46.13.2(A)(1)(a) through (c) of this Part on or before the following dates. The owner or operator of a CO₂ budget unit shall record, report and quality-assure the data from the monitoring systems under § 46.13.2(A)(1)(a) of this Part on and after the following dates:
 - a. The owner or operator of a CO₂ budget unit, except for a CO₂ budget unit under § 46.13.2(B)(1)(b) of this Part, that commences commercial operation before July 1, 2008, must comply with the requirements of § 46.13 of this Part this section by January 1, 2009.
 - b. The owner or operator of a CO₂ budget unit that commences commercial operation on or after July 1, 2008, must comply with the requirements of § 46.13 of this Part this section by the later of the following dates:
 - (1) January 1, 2009; or

- (2) The earlier of:
 - (AA) Ninety (90) unit operating days after the date on which the unit commences commercial operation; or
 - (BB) One hundred and eightyOne hundred eighty (180) calendar days after the date on which the unit commences commercial operation.
- c. For the owner or operator of a CO₂ budget unit for which construction of a new stack or flue installation is completed after the applicable deadline under §§ 46.13.2(B)(1)(a) or (b) of this Part by the earlier of:
 - (1) Ninety (90) 90 unit operating days after the date on which emissions first exit to the atmosphere through the new stack or flue; or
 - (2) One hundred eighty One-hundred and eighty (180) 180 calendar days after the date on which emissions first exit to the atmosphere through the new stack or flue.

C. Reporting data.

- 1. Except as provided in § 46.13.2(C)(2) of this Part, the owner or operator of a CO₂ budget unit that does not meet the applicable compliance date set forth in §§ 46.13.2(B)(1)(a), 46.13.(2)(B)(2), and 46.13.(2)(B) through (3c) of this Part for any monitoring system under § 46.13.(2)(A)(1)(a) of this Part shall, for each such monitoring system, determine, record, and report maximum potential (or as appropriate minimum potential) values for CO₂ concentration, CO₂ emissions rate, stack gas moisture content, fuel flow rate, heat input, and any other parameter required to determine CO₂ mass emissions in accordance with 40 C.F.R. § 75.31(b)(2) or (c)(3) incorporated in § 46.4(A) of this Part, or 40 C.F.R. § 75, Section 2.4-of, Appendix D incorporated in § 46.4(A) of this Part as applicable.
- 2. The owner or operator of a CO₂ budget unit that does not meet the applicable compliance date set forth in § 46.13.2(B)(1)(c) of this Part for any monitoring system under § 46.13.2(A)(1)(a) of this Part shall, for each such monitoring system, determine, record, and report substitute data using the applicable missing data procedures in 40 C.F.R. § 75, Subpart D or Appendix D incorporated in § 46.4(A) of this Part, in lieu of the maximum potential (or as appropriate minimum potential) values for a parameter if the owner or operator demonstrates that there is continuity

between the data streams for that parameter before and after the construction or installation under § 46.13.2(B)(1)(c) of this Part.

- a. CO₂ budget units subject to an acid rain emissions limitation or CSAPR NOx Ozone Season Trading Program that qualify for the optional SO₂, NOx, and CO₂ (for acid rain) or NOx CSAPR NeOx Ozone Season Trading Program emissions calculations for low mass emissions (LME) units under 40 C.F.R. § 75.19, incorporated in § 46.4(A) of this Part, and report emissions for such programs using the calculations under 40 C.F.R. § 75.19 incorporated in § 46.4(A) of this Part, shall also use the CO₂ emissions calculations for LME units under 40 C.F.R. § 75.19, incorporated in § 46.4(A) of this Part, for purposes of compliance with this regulation.
- 4b. CO₂ budget units subject to an acid rain emissions limitation or that do not qualify for the optional SO₂, NOx, and CO₂ (for acid rain) or NOx CSAPR NOx Ozone Season Trading Program emissions calculations for LME units under 40 C.F.R. § 75.19, incorporated in § 46.4(A) of this Part, shall not use the CO₂ emissions calculations for LME units under 40 C.F.R. § 75.19, incorporated in § 46.4(A) of this Part, for purposes of compliance with this regulation.
- 5c. CO₂ budget units not subject to an acid rain emissions limitation or CSAPR NOx Ozone Season Trading Program shall qualify for the optional CO₂ emissions calculation for LME units under 40 C.F.R. § 75.19, incorporated in § 46.4(A) of this Part, provided that they emit less than one-hundred (100) tons of NOx annually and no more than twenty-five (25) tons of SO₂ annually.

D. Prohibitions.

- 1. No owner or operator of a CO₂ budget unit shall use any alternative monitoring system, alternative reference method, or any other alternative for the required continuous emissions monitoring system without having obtained prior written approval in accordance with § 46.14.5 of this Part.
- 2. No owner or operator of a CO₂ budget unit shall operate the unit so as to discharge, or allow to be discharged, CO₂ emissions to the atmosphere without accounting for all such emissions in accordance with the applicable provisions of § 46.13 of this Part this section and 40 C.F.R. § 75 incorporated in § 46.4(A) of this Part.
- 3. No owner or operator of a CO₂ budget unit shall disrupt the continuous emissions monitoring system, any portion thereof, or any other approved

emissions monitoring method, and thereby avoid monitoring and recording CO₂ mass emissions discharged into the atmosphere, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of § 46.13 of this Part this section and 40 C.F.R. § 75 incorporated in § 46.4(A) of this Part.

- 4. No owner or operator of a CO₂ budget unit shall retire or permanently discontinue use of the continuous emissions monitoring system, any component thereof, or any other approved emissions monitoring system under § 46.13 of this Part this section, except under any one of the following circumstances:
 - a. The owner or operator is monitoring emissions from the unit with another certified monitoring system approved, in accordance with the applicable provisions of § 46.13 of this Part this section and 40 C.F.R. § 75 incorporated in § 46.4(A) of this Part, by the Department for use at that unit that provides emissions data for the same pollutant or parameter as the retired or discontinued monitoring system; or
 - b. The CO₂ authorized account representative submits notification of the date of certification testing of a replacement monitoring system in accordance with § 46.13.3(D)(3)(a)((1)) of this Part.

46.13.3 Initial certification and recertification procedures

- A. The owner or operator of a CO₂ budget unit shall be exempt from the initial certification requirements of § 46.13.3 of this Part this subsection for a monitoring system under § 46.13.1(A) of this Part, if the following conditions are met:
 - 1. The monitoring system has been previously certified in accordance with 40 C.F.R. § 75 incorporated in § 46.4(A) of this Part; and
 - 2. The applicable quality-assurance and quality-control requirements of 40 C.F.R. § 75.21 incorporated in § 46.4(A) of this Part and 40 C.F.R. § 75, Appendix B and Appendix D incorporated in § 46.4(A) of this Part, are fully met for the certified monitoring system described in § 46.13.3(A)(1) of this Part.
- B. The recertification provisions of § 46.13.3 of this Part this subsection shall apply to a monitoring system under § 46.13.2(A)(1)(a) exempt from initial certification requirements under § 46.13.3(A) of this Part.

- C. Notwithstanding § 46.13.3(A) of this Part, if the Administrator has previously approved a petition under 40 C.F.R. § 75.72(b)(2)(ii) incorporated in § 46.4(A) of this Part, or 40 C.F.R. § 75.16(b)(2)(ii)(B) incorporated in § 46.4(A) of this Part as pursuant to 40 C.F.R. § 75.13 incorporated in § 46.4(A) of this Part for apportioning the CO₂ emissions rate measured in a common stack or a petition under 40 C.F.R. § 75.66 incorporated in § 46.4(A) of this Part of this chapter for an alternative requirement in 40 C.F.R. § 75 incorporated in § 46.4(A) of this Part, the CO₂ authorized account representative shall submit the petition to the Department under § 46.14.5(A) of this Part, to determine whether the approval applies under this program.
- D. Except as provided in § 46.13.3(A) of this Part, the owner or operator of a CO₂ budget unit shall comply with the following initial certification and recertification procedures for a continuous emissions monitoring system and an excepted monitoring system under 40 C.F.R. § 75, Appendix D incorporated in § 46.4(A) of this Part, and under § 46.13.2(A)(1)(a) of this Part. The owner or operator of a unit that qualifies to use the low mass emissions excepted monitoring methodology in 40 C.F.R. § 75.19 incorporated in § 46.4(A) of this Part or that qualifies to use an alternative monitoring system under 40 C.F.R. § 75, Subpart E incorporated in § 46.4(A) of this Part, shall comply with the procedures in §§ 46.13.3(E)(1) or (F)(1) of this Part, respectively.
 - 1. Requirements for initial certification.
 - a. The owner or operator shall ensure that each monitoring system required under § 46.13.2(A)(1)(a) of this Part, (which includes the automated data acquisition and handling system) successfully completes all of the initial certification testing required under 40 C.F.R. § 75.20 incorporated in § 46.4(A) of this Part. The owner or operator shall ensure that all applicable certification tests are successfully completed by the deadlines specified in § 46.13.2(B) of this Part. In addition, whenever the owner or operator installs a monitoring system in order to meet the requirements of § 46.13 of this Part this section in a location where no such monitoring system was previously installed, initial certification in accordance with 40 C.F.R. § 75.20 incorporated in § 46.4(A) of this Part is required.
 - 2. Requirements for recertification.
 - a. Whenever the owner or operator makes a replacement, modification, or change in a certified monitoring system that the Administrator or the Department determines significantly affects the ability of the system to accurately measure or record CO₂ mass emissions or to meet the requirements of 40 C.F.R. § 75.21

incorporated in § 46.4(A) of this Part or 40 C.F.R. § 75 Appendix Bincorporated in § 46.4(A) of this Part, the owner or operator shall recertify the monitoring system according to 40 C.F.R. § 75.20(b) incorporated in § 46.4(A) of this Part.

- b. For systems using stack measurements such as stack flow, stack moisture content, CO₂ or O₂ monitors, whenever the owner or operator makes a replacement, modification, or change to the flue gas handling system or the unit's operation that the Administrator or the Department determines to significantly change the flow or concentration profile, the owner or operator shall recertify the continuous emissions monitoring system according to 40 C.F.R. § 75.20(b) incorporated in § 46.4(A) of this Part. Examples of changes which require recertification include: replacement of the analyzer, change in location or orientation of the sampling probe or site, or changing of flow rate monitor polynomial coefficients.
- 3. Approval process for initial certifications and recertification.
 - a. §§ 46.13.3(D)(3)(a)((1)) through ((4)) of this Part apply to both initial certification and recertification of a monitoring system under § 46.13.2(A)(1)(a) of this Part. For re-certifications, replace the words "certification" and "initial certification" with the word "recertification," replace the word "certified" with "recertified," and proceed in the manner prescribed in 40 C.F.R. § 75.20(b)(5) and (g)(7) incorporated in § 46.4(A) of this Part in lieu of § 46.13.3(D)(3)(a) ((5)) of this Part.
 - (1) Notification of certification—The CO₂ authorized account representative shall submit to the Department or its agent, the appropriate EPA Regional Office and the Administrator a written notice of the dates of certification in accordance with § 46.13.5 of this Part.
 - (2) Certification application——The CO₂ authorized account representative shall submit to the Department or its agent a certification application for each monitoring system. A complete certification application shall include the information specified in 40 C.F.R. § 75.63—incorporated in § 46.4(A) of this Part.
 - e(3) Provisional certification data ___. The provisional certification date for a monitor shall be determined in accordance with 40 C.F.R. § 75.20(a)(3) incorporated in § 46.4(A) of this Part. A

provisionally certified monitor may be used under the CO₂ budget Trading Program for a period not to exceed one hundred twenty (120) days after receipt, by the Department or its agent, of the complete certification application for the monitoring system or component thereof under § 46.13.3(D) (3)(a)((2)) of this Part. Data measured and recorded by the provisionally certified monitoring system or component thereof, in accordance with the requirements of 40 C.F.R. § 75 incorporated in § 46.4(A) of this Part, will be considered valid quality-assured data (retroactive to the date and time of provisional certification), provided that the Department or its agent does not invalidate the provisional certification by issuing a notice of disapproval within one -hundred twenty (120)-120 days of receipt of the complete certification application by the Department or its agent.

- (4) Certification application approval process——The Department or its agent will issue a written notice of approval or disapproval of the certification application to the owner or operator within one—hundred twenty (120) days of receipt of the complete certification application under § 46.13.3(D)(3) (a)((2)) of this Part. In the event the Department or its agent does not issue such a notice within such one—hundred twenty (120)—120—120—day period, each monitoring system which meets the applicable performance requirements of 40 C.F.R. § 75 incorporated in § 46.4(A) of this Part and is included in the certification application will be deemed certified for use under the CO₂ Budget Trading Program.
 - (AA) Approval notice If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of 40 C.F.R. § 75 incorporated in § 46.4(A) of this Part, then the Department or its agent will issue a written notice of approval of the certification application within one hundred twenty (120) 120 days of receipt.
 - (BB) Incomplete application notice——If the certification application is not complete, then—the Department or its agent will issue a written notice of incompleteness that sets a reasonable date by which the CO₂ authorized account representative must submit the additional information required to complete the certification application. If the CO₂ authorized account

- representative does not comply with the notice of incompleteness by the specified date, then the Department or its agent may issue a notice of disapproval under § 46.13.3(D)(3)(a)((4))((BB)) of this Part. The one hundred twenty (120) 120120-day review period shall not begin before receipt of a complete certification application.
- (CC) Disapproval notice____ If the certification application shows that any monitoring system or component thereof does not meet the performance requirements of 40 C.F.R. § 75 incorporated in § 46.4(A) of this Part, or if the certification application is incomplete and the requirement for disapproval under § 46.13.3(D)(3)(a)((4))((CC)) of this Part is met, then the Department or its agent will issue a written notice of disapproval of the certification application. Upon issuance of such notice of disapproval, the provisional certification is invalidated by the Department or its agent and the data measured and recorded by each uncertified monitoring system or component thereof shall not be considered valid quality assured data beginning with the date and hour of provisional certification. The owner or operator shall follow the procedures for loss of certification in § 46.13.3(D)(3) (a)((5)) of this Part for each monitoring system or component thereof, which is disapproved for initial certification.
- (DD) Audit decertification ——The Department or its agent may issue a notice of disapproval of the certification status of a monitor in accordance with § 46.13.4(B) of this Part.
- (5) Procedures for loss of certification——If the Department or its agent issues a notice of disapproval of a certification application under § 46.13.3(D)(3)(a)((4))((CC)) of this Part or a notice of disapproval of certification status under § 46.13.3(D)(3)(a)((4))((DD)) of this Part, then:
 - (AA) The owner or operator shall substitute the following values for each disapproved monitoring system, for each hour of unit operation during the period of invalid data beginning with the date and hour of provisional

certification and continuing until the time, date, and hour specified under 40 C.F.R. § 75.20(a)(5)(i) incorporated in § 46.4(A) of this Part or 40 C.F.R. § 75.20(g)(7) incorporated in § 46.4(A) of this Part:

- (i) For units monitoring or intending to monitor, for CO₂ mass emissions using heat input or for units using the low mass emissions excepted methodology under 40 C.F.R. § 75.19incorporated in § 46.4(A) of this Part, the maximum potential hourly heat input of the unit; or
- (ii) For units monitoring or intending to monitor, for CO₂ mass emissions using a CO₂ pollutant concentration monitor and a flow monitor, the maximum potential concentration of CO₂ and the maximum potential flow rate of the unit under 40 C.F.R. § 75, Section 2.1 of Appendix A incorporated in § 46.4(A) of this Part.
- (BB) The CO₂ authorized account representative shall submit a notification of certification retest dates and a new certification application in accordance with §§ 46.13.3(D)(3)(a) ((1)) and ((2)) of this Part; and
- (CC) The owner or operator shall repeat all certification tests or other requirements that were failed by the monitoring system, as indicated in the Department's or its agent's notice of disapproval, no later than thirty (30) unit operating days after the date of issuance of the notice of disapproval.
- E. Initial certification and recertification procedures for low mass emissions units using the excepted methodologies under § 46.13.2(C)(3) of this Part.
 - 1. The owner or operator of a unit qualified to use the low mass emissions excepted methodology under § 46.13.2(C)(3) of this Part, shall meet the applicable certification and recertification requirements of 40 C.F.R. § 75.19(a)(2) incorporated in § 46.4(A) of this Part, 40 C.F.R. § 75.20(h) incorporated in § 46.4(A) of this Part, and § 46.13.3 of this Part. If the owner or operator of such a unit elects to certify a fuel flow meter system for heat input determinations, the owner or operator shall also meet the

certification and recertification requirements in 40 C.F.R. § 75.20(g) incorporated in § 46.4(A) of this Part.

- F. Certification/recertification procedures for alternative monitoring systems.
 - 1. The CO₂ authorized account representative representing the owner or operator of each unit applying to monitor using an alternative monitoring system approved by the Administrator and, if applicable, the Department under 40 C.F.R. § 75 Subpart E<u>incorporated in § 46.4(A) of this Part</u>, shall comply with the applicable notification and application procedures of 40 C.F.R. § 75.20(f) incorporated in § 46.4(A) of this Part.

46.13.4 Out-of-control periods

- A. Whenever any monitoring system fails to meet the quality assurance and quality control requirements or data validation requirements of 40 C.F.R. § 75 incorporated in § 46.4(A) of this Part, data shall be substituted using the applicable procedures in 40 C.F.R. § 75-, Subpart D or Appendix D incorporated in § 46.4(A) of this Part.
- B. Audit decertification --- Whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any monitoring system should not have been certified or recertified because it did not meet a particular performance specification or other requirement under § 46.13.3 of this Part or the applicable provisions of 40 C.F.R. § 75 incorporated in § 46.4(A) of this Part, both at the time of the initial certification or recertification application submission and at the time of the audit, the Department or Administrator will issue a notice of disapproval of the certification status of such monitoring system. For the purposes of this paragraph, an audit shall be either a field audit or an audit of any information submitted to the Department or the Administrator. By issuing the notice of disapproval, the Department or Administrator revokes, prospectively, the certification status of the monitoring system. The data measured and recorded by the monitoring system shall not be considered valid, quality-assured data from the date of issuance of the notification of the revoked certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests for the monitoring system. The owner or operator shall follow the initial certification or recertification procedures in § 46.13.3 of this Part for each disapproved monitoring system.

46.13.5 Notifications

The CO₂ authorized account representative for a CO₂ budget unit shall submit written notice to the Department and the Administrator in accordance with 40 C.F.R. § 75.61 incorporated in § 46.4(A) of this Part.

46.14 Recordkeeping and Reporting

46.14.1 General requirements

The CO₂ authorized account representative shall comply with all recordkeeping and reporting requirements in this section, the applicable record keeping and reporting requirements under 40 C.F.R. § 75.73 incorporated in § 46.4(A) of this Part and with the requirements of § 46.9.1(E) of this Part.

46.14.2 Monitoring plans

The owner or operator of a CO₂ budget unit shall submit a monitoring plan in the manner prescribed in of 40 C.F.R. § 75.62 incorporated in § 46.4(A) of this Part.

46.14.3 Certification applications

The CO₂ authorized account representative shall submit an application to the Department or its agent within forty-five (45) days after completing all CO₂ monitoring system initial certification or recertification tests required under § 46.13.3 of this Part, including the information required under 40 C.F.R. § 75.63 and 40 C.F.R. § 75.53(eg) and (†h), incorporated in § 46.4(A) of this Part.

46.14.4 Quarterly reports

- A. 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 Department, for each calendar quarter beginning with:
 - a. For a unit that commences commercial operation before July 1, 2008, the calendar quarter covering January 1, 2009, through March 31, 2009; or
 - b. For a unit commencing commercial operation on or after July 1, 2008, the calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under § 46.13.2(B) of this Part or, unless that quarter is the third or fourth quarter of 2008, in which case reporting shall

commence in the quarter covering January 1, 2009, through March 31, 2009.

- 2. The CO₂ authorized account representative shall submit each quarterly report to the Department or its agent within thirty (30) days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in 40 C.F.R. § 75 Subpart H incorporated in § 46.4(A) of this Part, and 40 C.F.R. § 75.64 incorporated in § 46.4(A) of this Part. Quarterly reports shall be submitted for each CO₂ budget unit (or group of units using a common stack), and shall include all of the data and information required in Subpart G of 40 C.F.R. § 75. Subpart G, incorporated in § 46.4(A) of this Part, except for opacity, NOx and SO₂ provisions.
- 3. Compliance certification——The CO₂ authorized account representative shall submit, to the Department or its agent, a compliance certification in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that:
 - a. The monitoring data submitted were recorded in accordance with the applicable requirements of §§ 46.13 and 46.14 of this Part this section, § 46.13 of this Part. and 40 C.F.R. § 75 incorporated in § 46.4(A) of this Part, including the quality assurance procedures and specifications;
 - b. For a unit with add-on CO₂ emissions controls and for all hours where data are substituted in accordance with 40 C.F.R. § 75.34(a) (1) incorporated in § 46.4(A) of this Part, the add-on emissions controls were operating within the range of parameters listed in the quality assurance/quality control program under 40 C.F.R. § 75, Appendix B incorporated in § 46.4(A) of this Part and the substitute values do not systematically underestimate CO₂ emissions; and
 - c. The CO₂ concentration values substituted for missing data under 40 C.F.R. § 75, Subpart D <u>incorporated in § 46.4(A) of this Part</u> do not systematically underestimate CO₂ emissions.

46.14.5 Petitions

A. Except as provided in § 46.14.5(C) of this Part, the CO₂ authorized account representative of a CO₂ budget unit that is subject to an Acid Rain emissions limitation may submit a petition to the Administrator under 40 C.F.R. § 75.66

incorporated in § 46.4(A) of this Part and to the Department requesting approval to apply an alternative to any requirement of 40 C.F.R. § 75 incorporated in § 46.4(A) of this Part. Application of an alternative to any requirement of 40 C.F.R. § 75 incorporated in § 46.4(A) of this Part is in accordance with §§ 46.13 and 46.14 of this Part this section and § 46.13 only to the extent that the petition is approved in writing by the Administrator and subsequently approved in writing by the Department or its agent.

- B. Petitions for a CO₂ budget unit that is not subject to an Acid Rain emissions limitation.
 - 1. The CO₂ authorized account representative of a CO₂ budget unit that is not subject to an Acid Rain emissions limitation may submit a petition to the Administrator under 40 C.F.R. § 75.66 incorporated in § 46.4(A) of this Part and to the Department or its agent requesting approval to apply an alternative to any requirement of 40 C.F.R. § 75 incorporated in § 46.4(A) of this Part. Application of an alternative to any requirement of 40 C.F.R. § 75 incorporated in § 46.4(A) of this Part is in accordance with §§ 46.13 and § 46.14 of this Part, only to the extent that the petition is approved in writing by the Administrator and subsequently approved in writing by the Department or its agent.
 - 2. In the event that the Administrator declines to review a petition under § 46.14_(5)(B)(1) of this Part, the CO₂ authorized account representative of a CO₂ budget unit that is not subject to an Acid Rain emissions limitation may submit a petition to the Department or its agent requesting approval to apply an alternative to any requirement in §§ 46.13 and 46.14 of this Part. That petition shall contain all the relevant information specified in 40 C.F.R. § 75.66 incorporated in § 46.4(A) of this Part. Application of an alternative to any requirement in §§ 46.13 and 46.14 of this Part, is in accordance with §§ 46.13 and 46.14 of this Part, only to the extent that the petition is approved in writing by the Department or its agent.
- C. The CO₂ authorized account representative of a CO₂ budget unit that is subject to an Acid Rain emissions limitation may submit a petition to the Administrator under 40 C.F.R. § 75.66 incorporated in § 46.4(A) of this Part and to the Department or its agent requesting approval to apply an alternative to a requirement concerning any additional CEMS required under the common stack provisions of 40 C.F.R. § 75.72 incorporated in § 46.4(A) of this Part or a CO₂ concentration CEMS used under 40 C.F.R. § 75.71(a)(2) incorporated in § 46.4(A) of this Part. Application of an alternative to any such requirement is in accordance with this section and §§ 46.14 and 46.15 of this Part, only to the extent the petition is approved in writing by the Administrator, and subsequently approved in writing by the Department or its agent.

46.14.6 CO₂ budget units that co-fire eligible biomass

- A. The CO₂ authorized account representative of a CO₂ budget unit that co-fires eligible biomass as a compliance mechanism under this regulation, shall report the following information to the Department or its agent for each calendar quarter:
 - 1. For each shipment of solid eligible biomass fuel fired at the CO₂ budget unit, the total eligible biomass fuel input, on an as-fired basis, in pounds.
 - 2. For each shipment of solid eligible biomass fuel fired at the CO₂ budget unit, the moisture content, on an as-fired basis, as a fraction by weight.
 - 3. For each distinct type of gaseous eligible biomass fuel fired at the CO₂ budget unit, on an as-fired basis, in pounds per standard cubic foot.
 - 4. For each distinct type of gaseous eligible biomass fuel fired at the CO₂ budget unit, the moisture content of the biogas, as a fraction by total weight.
 - 5. For each distinct type of gaseous eligible biomass fuel fired at the CO₂ budget unit, the total eligible biomass fuel input, in standard cubic feet.
 - 6. For each distinct type of eligible biomass fuel fired at the CO₂ budget unit, the dry basis carbon content of the fuel type, as a fraction by dry weight.
 - 7. For each distinct type of eligible biomass fuel fired at the CO₂ budget unit, the dry basis higher heating value, in MMBtu per dry pound.
 - 8. For each distinct type of eligible biomass fuel fired at the CO₂ budget unit, the total dry basis eligible biomass fuel input, in pounds, calculated in accordance with § 46.14.6(B) of this Part.
 - 9. The total amount of CO₂ emitted from the CO₂ budget unit due to firing eligible biomass fuel, in tons, calculated in accordance with § 46.14.6(C) of this Part.
 - 10. For each distinct type of eligible biomass fuel fired at the CO₂ budget unit, the total eligible biomass fuel heat input in MMBtu, calculated in accordance with § 46.14.6(D)(1) of this Part.
 - 11. The total amount of heat input to the CO₂ budget unit due to firing eligible biomass fuel in MMBtu, calculated in accordance with § 46.14.6(D)(2) of this Part.

- 12. Description and documentation of monitoring technology employed, and description and documentation of fuel sampling methodology employed, including sampling frequency; and
- 13. For each distinct type of eligible biomass fuel fired at the CO₂ budget unit, chemical analysis, including heating value and carbon content.
- B. An owner or operator of a CO₂ budget unit shall calculate and submit, to the Department or its agent, on a quarterly basis, the total dry weight for each distinct type of eligible biomass fired by the CO₂ budget unit during the reporting quarter. The total dry weight shall be determined for each fuel type as follows:
 - 1. For solid fuel types:

$$F_i = \sum_{i=1}^m (1 - M_i) \times F_i$$

Where:

F_i = **Total eligible biomass fuel** input (lbs) for fuel type j;

F_i = Eligible biomass fuel input (lbs) for fired shipment I;

M_i = Moisture content (fraction) for fired shipment I;

i – fired fuel shipment;

j = fuel type; and,

m = number of shipments.

2. For gaseous fuel types:

$$F_j = D_j \times V_j \times (1 - M_j)$$

Where:

 F_j = Total eligible biomass dry basis fuel input (lbs) for fuel type j;

D = Density of biogas (lbs/scf) for fuel type j;

V = Total volume (scf) for fuel type j;

 M_i = Moisture content (fraction) for fuel type j,

J = fuel type

- C. CO₂ emissions due to firing of eligible biomass shall be determined as follows:
 - 1. For any full calendar quarter during which no fuel other than eligible biomass combusted at the CO₂ budget unit, as measured and recorded in accordance with this section and § 46.13 of this Part; or
 - 2. For any full calendar quarter during which fuels, other than eligible biomass, are combusted at the CO₂ budget unit, as determined using the following equation:

$$CO_2tons = \sum_{j=1}^{n} F_j \times C_j \times O_j \times \frac{44}{12} \times 0.0005$$

Where:

 CO_2 tons = CO_2 emissions due to firing of eligible biomass for the reporting quarter;

 $F_{\rm j}$ = Total eligible biomass dry basis fuel input (lbs) for fuel type j, as calculated in § 46.14.6(B);

 C_j = carbon fraction (dry basis) for fuel type j;

 O_j = Oxidation factor for eligible biomass fuel type j, derived for solid fuels based on the ash content of the eligible biomass fired and the carbon content of this ash, as determined pursuant to § 46.14.6(A)(12); for gaseous eligible biomass fuels, a default oxidation factor of 0.995 may be used;

44/12 = the number of short tons which is equal to one pound;

j = fuel type; and

n = number of distinct fuel types.

- D. Heat input due to firing of eligible biomass for each quarter shall be determined as follows:
 - 1. For each distinct fuel type:

$$H_j = F_j \times HHV_j$$

Where:

 H_i = Heat input (MMBtu) for fuel type j;

 F_j = Total eligible biomass dry basis fuel input (lbs) for fuel type j, as calculated in § 46.14.6(B);

 HHV_j = Higher heating value (MMBtu/lb), dry basis, for fuel type j, as determined through chemical analysis;

J = fuel type.

2. For all fuel types:

$$Heat\ Input\ MMBtu = \sum_{j=1}^n H_j$$

Where:

 H_i = Heat input (MMBtu) for fuel type j:

j = fuel type; and

n = number of distinct fuel types.

E. Fuel sampling methods and fuel sampling technology shall be consistent with the New York State Renewable Portfolio Standard Biomass Guidebook, September 2011 incorporated in § 46.4(B) of this Part.

46.14.7 Additional requirements to provide output data

- A. A CO₂ budget source shall submit to the Department or its agent a method for quantification of net electrical output.
- B. CO₂ budget sources selling steam should use billing meters to determine net steam output. A CO₂ budget source whose steam output is not measured by billing meters or whose steam output is combined with output from a unit that is not a CO₂ budget unit prior to measurement by the billing meter shall propose, to the Department or its agent, an alternative method for quantification of net steam

- output. If data for steam output is not available, the CO₂ budget source may report heat input providing useful steam output as a surrogate for steam output.
- C. Monitoring -- The owner or operator of each CO₂ budget unit shall submit an output monitoring plan. The output monitoring plan must include a description and diagram as stated below:
 - 1. Submit a diagram of the electrical and/or steam system for which output is being monitored, specifically including the following:
 - a. If the CO₂ budget unit monitors net electric output, the diagram should contain all CO₂ budget unit and all generators served by each CO₂ budget units and generators. If a generator served by a CO₂ budget unit is also served by a unit that is not a CO₂ budget unit, the unit that is not a CO₂ budget unit and its relationship to each generator should be indicated on the diagram as well. The diagram should indicate where the net electric output is measured and should include all electrical inputs and outputs to and from the plant. If net electric output is determined using a billing meter, the diagram should show each billing meter used to determine net sales of electricity and should show that all electricity measured at the point of sale is generated by the CO₂ budget units.
 - If the CO₂ budget unit monitors net thermal output, the diagram b. should include all steam or hot water coming into the net steam system, including steam from CO₂ budget units and units that are not CO₂ budget units, and all exit points of steam or hot water from the net steam system. In addition, each input and output stream will have an estimated temperature, pressure and phase indicator, and an enthalpy in Btu/lb. The diagram of the net steam system should identify all useful loads, house loads, parasitic loads, any other steam loads and all boiler feedwater returns. The diagram will represent all energy losses in the system as either usable or unusable losses. The diagram will also indicate all flow meters, temperature or pressure sensors or other equipment used to calculate gross thermal output. If a sales agreement is used to determine net thermal output, the diagram should show the monitoring equipment used to determine the sales of steam.
 - 2. Submit a description of each output monitoring system. The description of the output monitoring system should include a written description of the output system and the equations used to calculate output. For net thermal energy systems descriptions and justifications of each useful load should be included.

- 3. Submit a detailed description of all quality assurance/quality control activities that will be performed to maintain the output system in accordance with § 46.14.7(E) of this Part.
- 4. Submit documentation supporting any output value(s) to be used as a missing data value should there be periods of invalid output data. The missing data output value must be either zero or an output value that is likely to be lower than a measured value and that is approved as part of the monitoring plan required under this subsection.
- D. Initial certification——A certification statement must be submitted by the CO₂ authorized account representative stating that either the output monitoring system consists entirely of billing meters or that the output monitoring system meets one of the accuracy requirements for non-billing meters in § 46.14.7(D)(2) of this Part. This statement may be submitted with the certification application required under § 46.14.3 of this Part.
 - 1. Billing meters The billing meter shall record the electric or thermal output. Any electric or thermal output values that the facility reports must be the same as the values used in billing for the output. Any output measurement equipment used as a billing meter in commercial transactions requires no additional certification or testing.
 - 2. Non-billing meters_-_For non-billing meters, the output monitoring system shall either meet an accuracy of within ten percent (10%) of the reference value, or each component monitor for the output system must meet an accuracy of within three percent (3%) of the full scalefull-scale value, whichever is less stringent.
 - a. System approach to accuracy.
 - (1) The system approach to accuracy must include a determination of how the system accuracy of ten percent (10%) is achieved using the individual components in the system and should include data loggers and any wattmeters used to calculate the final net electric output data and/or any flowmeters for steam or condensate, temperature measurement devices, absolute pressure measurement devices, and differential pressure devices used for measuring thermal energy.
 - b. Component approach to accuracy.
 - (1) If testing a piece of output measurement equipment shows that the output readings are not accurate to within three

percent (3.0%)-percent of the full-scale value, then the equipment should be repaired or replaced to meet that requirement. Data shall remain invalid until the output measurement equipment passes an accuracy test or is replaced with another piece of equipment that passes the accuracy test.

- E. Ongoing QA/QC. The following ongoing quality assurance/quality control activities must be performed in order to maintain the output system:
 - 1. Billing meters.
 - a. In the case where billing meters are used to determine output, no QA/QC activities beyond what are already performed are required.
 - 2. Non-billing meters.
 - Certain types of equipment such as potential transformers, current a. transformers, nozzle and venturie type meters, and the primary element of an orifice plate only require an initial certification of calibration and do not require periodic recalibration unless the equipment is physically changed. However, the pressure and temperature transmitters accompanying an orifice plate will require periodic retesting. For such pressure and temperature transmitters, and other types of equipment, either recalibrate or re-verify the meter accuracy at least once every two_(2) years (i.e., every eight_ (8) calendar quarters), unless a consensus standard allows for less frequent calibrations or accuracy tests. For non-billing meters, the output monitoring system must either meet an accuracy of within_ ten percent ten percent (10%) of the reference value, or each component monitor for the output system must meet an accuracy of within three percent (3%) of the full scalefull-scale value, whichever is less stringent. If testing a piece of output measurement equipment shows that the output readings are not accurate to within three percent (3.0%) percent of the full scalefull-scale value, then the equipment should be repaired or replaced to meet that requirement.
 - 3. Out-of-control periods.
 - a. If testing a piece of output measurement equipment shows that the output readings are not accurate to the certification value, data remain invalid until the output measurement equipment passes an accuracy test or is replaced with another piece of equipment that

passes the accuracy test. All invalid data shall be replaced by either zero or an output value that is likely to be lower than a measured value and that is approved as part of the monitoring plan required under § 46.14.7(C) of this Part.

F. Recordkeeping and reporting

- 1. General provisions.
 - a. The CO₂ authorized account representative shall comply with all recordkeeping and reporting requirements in this section and with the requirements of §§ 46.7(C) and 46.9.1(E) of this Part.
- 2. Recordkeeping.
 - a. The owner or operator of a CO₂ budget unit shall retain data used to monitor, determine, or calculate net generation for ten_(10) years from the date reported.
- Annual reports.
 - a. The CO₂ authorized account representative shall submit annual output reports, as follows. The data must be sent both electronically and in hardcopy by March 1 for the immediately preceding calendar year to the Department or its agent. The annual report shall include the annual total unit level MWh, the annual total useful thermal energy and a certification statement from the CO₂ authorized account representative stating the following:
 - (1) "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 for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

46.15 Compliance Certification

46.15.1 Compliance certification report

- A. Applicability and deadline.—-For each control period in which a CO₂ budget source is subject to the CO₂ requirements of § 46.7(A) of this Part, the CO₂ authorized account representative of the source shall submit, to the Department_or its agent, by the March 1 following the relevant control period, a compliance certification report. A compliance certification report is not required as part of the compliance obligation during an interim control period.
- B. Contents of report_-The CO₂ authorized account representative shall include in the compliance certification report under § 46.15.1(A) of this Part the following elements, in a format prescribed by the Department concerning each unit at the source and subject to the CO₂ budget emissions limitation for the control period covered by the report:
 - 1. Identification of the source and each CO₂ budget unit at the source;
 - 2. At the CO₂ authorized account representative's option, the serial numbers of the CO₂ allowances that are to be deducted from the source's compliance account under § 46.12.5 of this Part, for the control period, including the serial numbers of any CO₂ offset allowances that are to be deducted subject to the limitations of § 46.12.5(A)(1)(c) of this Part; and
 - 3. The compliance certification under 46.15.1(C) of this Part.
- C. Compliance certification——In the compliance certification report under § 46.15.1(A) of this Part, the CO₂ authorized account representative shall certify, based on reasonable inquiry of those persons with primary responsibility for operating the source and the CO₂ budget units at the source in compliance with the CO₂ Budget Trading Program, whether the source and each CO₂ budget unit for which the compliance certification is submitted was operated during the calendar years covered by the report in compliance with the requirements of the CO₂ Budget Trading Program, applicable to the unit, including:
 - 1. Whether the source was operated in compliance with the CO₂ requirements of § 46.7(A) of this Part;
 - 2. Whether the monitoring plan applicable to each unit at the source has been maintained to reflect the actual operation and monitoring of the unit, and contains all information necessary to attribute CO₂ emissions to the unit, in accordance with §§ 46.13 and 46.14 of this Part;

- 3. Whether all the CO₂ emissions from the units at the source were monitored or accounted for through the missing data procedures and reported in the quarterly monitoring reports, including whether conditional data were reported in the quarterly reports in accordance with §§ 46.13 and 46.14 of this Part. If conditional data were reported, the owner or operator shall indicate whether the status of all conditional data has been resolved and all necessary quarterly report resubmissions have been made;
- 4. Whether the facts that form the basis for certification under §§ 46.13 and 46.14 of this Part, of each monitor at each unit at the source, or for using an accepted monitoring method or alternative monitoring method approved under §§ 46.13 and 46.14 of this Part, if any, have changed; and
- 5. If a change is required to be reported under § 46.15.1(C)(4) of this Part, specify the nature of the change, the reason for the change, when the change occurred, and how the unit's compliance status was determined subsequent to the change, including what method was used to determine emissions when a change mandated the need for monitor recertification.

46.15.2 Department's action on compliance certifications

- A. The Department or its agent may review and conduct independent audits concerning any compliance certification or any other submission under the CO₂ Budget Trading Program and make appropriate adjustments of the information in the compliance certifications or other submissions.
- B. The Department or its agent may deduct CO₂ allowances from or transfer CO₂ allowances to a source's compliance account based on the information in the compliance certifications or other submissions, as adjusted under § 46.15.2(A) of this Part.

46.16Reserved

46.17CO₂ Emissions Offset Projects

46.17.1 Applicability

Rhode Island will not accept CO₂ emissions offset project applications. All eligible CO₂ offset allowances awarded by any other participating RGGI state will be accepted by Rhode Island for compliance purposes in accordance with the limitations as specified in § 46.12.5(A)(1)(c) of this Part.—. This section applies to the sponsor of any CO₂ emissions offset project undertaken to create CO₂ offset allowances for sale or use in the State of Rhode Island in accordance with the requirements of this regulation or in any other participating state.

46.17.2 General requirements for CO₂ emissions offset projects

- A. Eligible CO₂ emissions offset projects. To qualify for the award of CO₂ offset allowances, offset projects shall satisfy all the applicable requirements of this section.
- 1. Offset project types. The following types of offset projects are eligible for the award of CO₂ offset allowances.
- a. Landfill methane capture and destruction;
- b. Reduction in emissions of sulfur hexafluoride (SF₆);
- c. Sequestration of carbon due to reforestation, improved forest management, or avoided conversion:
- d. Reduction or avoidance of CO₂ emissions from natural gas, oil, or propane enduse combustion due to end use energy efficiency; and
- e. Avoided methane emissions from agricultural manure management operations.
- 2. Offset project locations
- a. To qualify for the award of CO₂-allowances under § 46.17 of this Part, eligible offset projects may be located in any of the following locations:

(1) In Rhode Island; and

- (2) In any state or other United States jurisdiction in which a cooperating regulatory agency has entered into a memorandum of understanding with the appropriate regulatory agencies of all participating states to carry out certain obligations relative to CO₂ emissions offset projects in that state or U.S. jurisdiction, including but not limited to the obligation to perform audits of offset project sites, and report violations of § 46.17 of this Part.
- b. Projects located (in whole or in part) in one or more participating states are not eligible for CO₂ offset allowances under § 46.17 of this Part, unless more of the CO₂ equivalent emissions reduction or carbon sequestration due to the offset project is projected to occur in Rhode Island than in any other participating state.

- B. Project sponsor. Any person may act as the sponsor of an eligible CO₂ emissions offset project provided that person meets the requirements of § 46.17(<u>.</u>3) of this Part.
- C. General additionality requirements. Except as provided with respect to specific offset project standards in § 46.17.(4) of this Part, the following general requirements shall apply to each offset project:
 - 1. CO₂ offset allowances shall not be awarded to an offset that is required pursuant to any local, state or federal law, regulation, or administrative or judicial order. If an offset project receives a consistency determination under § 46.17.(3) of this Part, and is later required by local, state or federal law, regulation, or administrative or judicial order, then the offset project shall remain eligible for the award of CO₂ offset allowances until the end of its current allocation period but its eligibility shall not be extended for an additional allocation period.
 - 2. CO₂ offset allowances shall not be awarded to an offset project that includes an electric generation component, unless the project sponsor transfers to the Department or its agent legal rights to any and all attribute credits (other than the CO₂ offset allowances that would be awarded under § 46.17.(6) of this Part) generated from the operation of the offset project that may be used for compliance with a renewable portfolio standard or other regulatory requirement.
 - 3. CO₂ offset allowances shall not be awarded to an offset project that receives funding or other incentives from any system benefit fund, or funds or other incentives provided through the auction/sale of CO₂-allowances.
 - 4. CO₂ offset allowances shall not be awarded to an offset project that is awarded credits or allowances under any other mandatory or voluntary greenhouse gas program, except for as described in § 46.17.(4) of this Part.
- D. Maximum allocation periods for CO₂ emissions offset projects
 - 1. Maximum allocation periods. Except as provided in § 46.17.(2)(D)(2) of this Part, the Department may award CO₂ offset allowances under § 46.17.(6) of this Part, for an initial ten (10)ten year allocation period. At the end of the initial ten (10)ten year allocation period the Department may

- award CO₂ offset allowances for a second ten (10)ten_year allocation-period, provided the offset sponsor has submitted a consistency-application pursuant to § 46.17.(3) of this Part, prior to the expiration of the initial allocation period, and the Department has issued a consistency-determination pursuant to § 46.17.(3)(E)(2) of this Part.
- 2. Maximum allocation period. The Department may award CO₂ offset allowances under § 46.17.(6) of this Part, for any project involving referestation, improved forest management, or avoided conversion offset project for an initial twenty five (25) 25 year allocation period. At the end of the initial twenty fivetwenty five (25) year allocation period, or any subsequent crediting period, the Department may award CO₂ offset allowances for a subsequent twenty five (25)25 year allocation period, provided the offset sponsor has submitted a consistency application for the offset project pursuant to § 46.17.(3 of this Part,) prior to the expiration of the initial allocation period, and the Department has issued a consistency determination pursuant to § 46.17.(3)(E)(2) of this Part.
- E. Offset project audit. Project sponsors shall provide, in writing, an access agreement to the Department granting the Department or its agent access to the physical location of the offset project to inspect for compliance with this section. For offset projects located in any state or other U.S. jurisdiction that is not a participating state, project sponsors shall also provide, in writing, an access agreement to the Department granting the cooperating regulatory agency with access to the physical location of the offset project to inspect for compliance with this section.
- F. Ineligibility due to noncompliance. If at any time the Department determines that a project sponsor has not complied with the requirements of this section, the Department may revoke and retire any and all CO₂ offset allowances in the project sponsor's general account. If at any time the Department determines that an offset project does not comply with the requirements of this section, then the Department may revoke any approvals it has issued relative to an offset project.

46.17.3 Application process

A. Establishment of general account. The sponsor of an offset project must establish a general account under § 46.12.(2)(B) of this Part. All submissions to the Department required for the award of CO₂ offset allowances under this section must be from the CO₂ authorized account representative for the general

account of the sponsor of the relevant offset project, herein referred to as "project sponsor."

B. Consistency application time frames

- 1. For offset projects not involving reforestation, improved forest management, or avoided conversion the consistency application must be submitted by the date that is six (6) months after the offset project is commenced.
- 2. For offset projects involving reforestation, improved forest management, or avoided conversion the consistency application must be submitted by the date that is one (1) year after the offset project is, except for as described in § 46.17.(4)(C)(9) of this Part.
- 3. Any consistency application that fails to meet the deadlines of this subsection will result in the denial of the consistency application and the continued ineligibility of the subject offset project.

C. Consistency application contents

- 1. For an offset project, the consistency application must include the following information:
 - a. The project's sponsor's name, address, e-mail address, telephonenumber, facsimile transmission number (if any), and accountnumber.
 - b. The offset project description as required by the relevant provisions of § 46.17.(4) of this Part.
 - e. A demonstration that the offset project meets all applicable requirements set forth in this section.
 - d. The emissions baseline determination as required by the relevant provisions of § 46.17(<u>.</u>4) of this Part.
 - e. An explanation of how the projected reduction or avoidance of atmospheric loading of CO₂ or CO₂ equivalent or the sequestration of carbon is to be quantified, monitored, and verified as required by the relevant provisions of § 46.17.(4) of this Part.

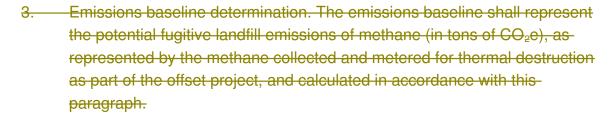
- f. A completed consistency application agreement that reads as follows:
- "The undersigned project sponsor recognizes and accepts that the application for, and the receipt of, CO_2 offset allowances under the CO_2 Budget Trading Program is predicated on the project sponsor following all the requirements of § 46.17. 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. I understand that eligibility for the award of CO_2 offset allowances under § 46.17 is contingent on meeting the requirements of § 46.17. I authorize 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. I understand that this right to audit shall include the right to enter the physical location of the offset project. I submit to the legal jurisdiction of the State of Rhode Island."
- g. A statement and certification report signed by the offset project sponsor certifying that all offset projects for which the sponsor has received CO₂ offset allowances under this subsection (or similar provisions in the rules of other participating states), under the sponsor's ownership or control (or under the ownership or control of any entity which controls, is controlled by, or has common control with the sponsor) are in compliance with all applicable requirements of the CO₂-Budget Trading Program in all participating states;
- h. A verification report and certification statement signed by an independent verifier accredited pursuant to § 46.17.(5) of this Part, that expresses that the independent verifier has reviewed the entire application and evaluated the following in relation to the applicable requirements in § 46.17(.2) and § 46.17.(4) of this Part, and any applicable guidance issued by the Department.
 - (1) The adequacy and validity of information supplied by the project sponsor to demonstrate that the offset project meets the applicable eligibility requirements of § 46.17.(2) and § 46.17.(4) of this Part.

- (2) The adequacy and validity of information supplied by the project sponsor to demonstrate baseline emissions pursuant to the applicable requirements of § 46.17_(4) of this Part.
- (3) The adequacy of the monitoring and verification plansubmitted pursuant to the applicable requirements of §-46.17.(4) of this Part.
- (4) Such other evaluations and statements as may be required by the Department.
- i. Disclosure of any voluntary or mandatory programs, other than the GO₂-Budget Trading Program, to which greenhouse gas emissions-data related to the offset project has been, or will be reported;
- j. For offset projects located in a state or United States jurisdiction that is not a participating state, a demonstration that the project sponsor has complied with all requirements of the cooperating regulatory agency in the state or United States jurisdiction where the offset project is located; and
- k. Any other information the department or the department's designee may require in order to evaluate the proposed offset project.
- Consistency applications shall be submitted in a format approved by the Department.
- D. Consistency applications may not be submitted to the Department if a consistency application has already been submitted for the same project, or any portion of the same project, in another participating state, unless the consistency application was rejected by another participating state solely because more of the CO₂ equivalent emissions reduction or carbon sequestration due to the offset project is projected to occur in Rhode Island than in any other participating state.
- E. Department action on consistency applications
 - 1. Completeness determination. Within sixty (60) days following receipt of the consistency application filed pursuant to § 46.17.(3)(B) of this Part, the Department will notify the project sponsor whether the consistency application is complete. A complete consistency application is one that is in an approved form and is determined by the Department to be complete.

- for the purpose of commencing review of the consistency application. Inno event shall a completeness determination prevent the Department from requesting additional information in order to enable the Department tomake a consistency determination under § 46.17.(3)(E)(2) of this Part.
- 2. Consistency determination. Within one hundred and twenty (120) days of making the completeness determination under § 46.17_(3)(E)(1) of this Part, the Department will issue a determination as to whether the offset project is consistent with the requirements of § 46.17_(2) and § 46.17_(3), and the requirements of the applicable offset project standard of § 46.17_(4) of this Part. For any offset project found to lack consistency with these requirements, the Department will inform the project sponsor of the offset project's deficiencies.

46.17.4 CO₂ emissions offset project standards

- A. Landfill methane capture and destruction. To qualify for the award of CO₂ offset allowances under § 46.17 of this Part, offset projects that capture and destroy methane from landfills shall meet the requirements of § 46.17 (4)(A) and all other applicable requirements of § 46.17 of this Part.
 - 1. Eligibility. Eligible offset projects shall occur at landfills that are not subject to Section 111 of the Federal Clean Air Act that addresses New Source-Performance Standards (NSPS) for municipal solid waste landfills, 40-C.F.R. § 60, Subpart Cc and Subpart WWW (xxxx2017).
 - 2. Offset project description. The offset project sponsor shall provide a detailed narrative of the offset project actions to be taken, including documentation that the offset project meets the eligibility requirements of § 46.17.(4)(A)(1) of this Part. The project narrative shall include the following information:
 - a. The owner and operator of the offset project;
 - b. The location and specifications of the landfill where the offset project will occur, including waste in place;
 - The owner and operator of the landfill where the offset project willoccur; and
 - d. Specifications of the equipment to be installed and a technical schematic of the offset project.



Emissions (tons CO₂e) = (V x M x (1 OX) x GWP)/2000-

Where:

V = Volume of methane collected (ft³)

M = Mass of methane per cubic foot (0.04246 lbs/ft³ default value at 1-atmosphere and 20°C)

OX = Oxidation factor (0.10), representing estimated portion of collected methane that would have eventually exidized to CO₂ if not collected

GWP = CO₂e global warming potential of methane (25)

- 4. Calculating emissions reductions. Emissions reductions shall be determined based on potential fugitive methane emissions that would have occurred at the landfill if metered methane collected from the landfill-for thermal destruction as part of the offset project was not collected and destroyed. CO₂e emissions reductions shall be calculated as follows:
- Emissions Reductions (tons CO₂e) = (V x M x (1 OX) x C_{ef} x GWP)/2000-Where:

V = Volume of methane collected (ft³)

- M = Mass of methane per cubic foot (0.04246 lbs/ft³ default value at 1 atmosphere and 20°C)
- OX = Oxidation factor (0.10), representing estimated portion of collected methane that would have eventually oxidized to CO₂ if not collected

C_{ef} = Combustion efficiency of methane control technology (0.98)

GWP = CO₂e global warming potential of methane (25)

5. Monitoring and verification requirements. Offset projects shall employ a landfill gas collection system that provides continuous metering and data

computation of landfill gas volumetric flow rate and methane concentration. Annual monitoring and verification reports shall include monthly volumetric flow rate and methane concentration data, including documentation that the methane was actually supplied to the combustion source. Monitoring and verification is also subject to the following requirements.

- a. The project sponsor shall submit a monitoring and verification planas part of the consistency application that includes a quality assurance and quality control program associated with equipment used to determine landfill gas volumetric flow rate and composition. The monitoring and verification plan shall also include provisions for ensuring that measuring and monitoring equipment is maintained, operated, and calibrated based on manufacturer recommendations, as well as provisions for the retention of maintenance records for audit purposes. The monitoring and verification plan shall be certified by an independent verifier accredited pursuant to § 46.17(.5) of this Part.
- b. The project sponsor shall annually verify landfill gas methane concentration through landfill gas sampling and independent laboratory analysis using applicable U.S. Environmental Protection Agency laboratory test methods.
- B. Reduction in emissions of sulfur hexafluoride (SF₆). To qualify for the award of CO₂ offset allowances under § 46.17 of this Part, offset projects that prevent emissions of sulfur hexafluoride to the atmosphere from equipment in the electricity transmission and distribution sector, through capture and storage, recycling, or destruction, shall meet the requirements of § 46.17 (4)(B) and all other applicable requirements of § 46.17 of this Part.

1. Eligibility

a. Eligible offset projects shall consist of incremental actions beyond those taken during the baseline year to achieve a reduction in SF₆-emissions relative to the baseline year. Eligible actions may include an expansion of existing actions. The identified actions to be taken shall be consistent with the guidance provided in High voltage switchgear and controlgear—Part 303: Use and handling of

sulphursulfur hexafluoride (SF6)(IEC/TR 62271-303 ed 1.0, and EPRI "SF6 Management for Substations," (1020014, 2010).

b. Except as provided in § 46.17_.(3)(B)(1) of this Part, eligible offset projects shall have an SF_e entity wide emissions rate for the baseline year that is less than the applicable emissions rate in § 46.17_.(4)(B)(1)(b)(1) (Table 1). The entity wide SF_e emissions rate shall be calculated as follows:

SF₆ Emissions Rate (%) = (Total SF₆ Emissions for Reporting Year)/ (Total SF₆ Nameplate Capacity at End of Reporting Year)

_____Where:

SF₆ Nameplate Capacity refers to all SF₆ containing equipment owned and/or operated by the entity, at full and proper SF₆ charge of the equipment rather than the actual charge of the equipment (which may reflect leakage).

(1) Table 1a SF_e Emissions Rate Performance Standards: Emission Regions

Region A	Region B	Region C	Region D	Region E
Connecticut	Alabama	Colorado	Arkansas	Alaska
Delaware	District of Columbia	Illinois	lowa	Arizona
Maine	Florida	Indiana	Kansas	California
Massachusetts	Georgia	Michigan	Louisiana	Hawaii
New Jersey	Kentucky	Minnesota	Missouri	ldaho
New York	Maryland	Montana	Nebraska	Nevada
New- Hampshire	Mississippi	North Dakota	New Mexico	Oregon
Pennsylvania	North Carolina	Ohio	Oklahoma	Washington
Rhode Island	South Carolina	South Dakota	Texas	
Vermont	Tennessee	Utah		
	Virginia	Wisconsin		
	West Virginia	Wyoming		

(2) Table 1b Emissions Rate Performance Standards

<u>Region</u>	Emission Rate ^a -
Region A	9.68%
Region B	5.22%
Region C	9.68%
Region D	5.77%
Region E	3.65%
U.S. (National)	9.68%

*Based on weighted average 2004 emissions rates for U.S. EPA SF₆ Partnership utilities in each region. If the weighted average emissions rate in a region is higher than the national weighted average, the default performance standard is the national weighted average emissions rate.

- c. An SF₆ offset project shall be eligible even if the SF₆ entity wide emissions rate in the baseline year exceeds the applicable rate in § 46.17.(4)(B)(1)(b) of this Part, provided that the project sponsor demonstrates in writing and the Department determines that the project is being implemented at a transmission and/or distribution entity serving a predominantly urban service territory and that at least two (2) of the following factors prevent optimal management of SF₆:
 - (1) The entity is comprised of older than average installed transmission and distribution equipment in relation to the national average age of equipment.
 - (2) A majority of the entity's electricity load is served by equipment that is located underground, and poor accessibility of such underground equipment precludes management of SF₆ emissions through regular ongoing maintenance.
 - (3) The inability to take a substantial portion of equipment out of service, as such activity would impair system reliability.
 - (4) Required equipment purpose or design for a substantial portion of entity transmission and distribution equipment results in inherently leak prone equipment.
- 2. Offset project description. The offset project sponsor shall provide a detailed narrative of the offset project actions to be taken, including documentation that the offset project meets the eligibility requirements of § 46.17.(4)(B)(1) of this Part. The offset project narrative shall include the following information:
 - A description of the transmission and/or distribution entityspecifying the service territory served by the entity.

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- 3. Emissions baseline determination. If the consistency application is filed after June 30, 2009, baseline SF₆ emissions shall be determined based on annual entity wide reporting of SF₆ emissions for the calendar year immediately preceding the calendar year in which the consistency application is filed (designated the baseline year). The reporting entity shall systematically track and account for all entity wide uses of SF₆ in order to determine entity wide emissions of SF₆. The scope of such tracking and accounting shall include all electric transmission and distribution assets and all SF₆ containing and SF₆ handling equipment owned and/or operated by the reporting entity.
 - Emissions shall be determined based on the following massbalance method:
 - SF₆ Emissions (lbs.) = (SF₆ Change in Inventory) + (SF₆ Purchases and Acquisitions) (SF₆ Sales and Disbursements) (Change in Total SF₆ Nameplate Capacity of Equipment)

-----Where:

- Change in Inventory is the difference between the quantity of SF₆-gas in storage at the beginning of the reporting year and the quantity in storage at the end of the reporting year. The term "quantity in storage" includes all SF₆-gas contained in cylinders (such as 115-pound storage cylinders), gas earts, and other storage containers. It does not refer to SF₆-gas held in SF₆-using operating equipment. The change in inventory will be negative if the quantity of SF₆-gas in storage increases over the course of the year.
- Purchases and Acquisitions of SF_e is the sum of all the SF_e gas acquired from other parties during the reporting year, as contained in storage containers or SF_e using operating equipment.
- Sales and disbursements of SF_e is the sum of all the SF_e gas sold or otherwise disbursed to other parties during the reporting year, as

	contained in storage containers and SF ₆ -using operating equipment.
	Change in Total SF ₆ Nameplate Capacity of Equipment is the net- change in the total volume of SF ₆ containing operating equipment- during the reporting year. The net change in nameplate capacity is equal to new equipment nameplate capacity, minus retired equipment nameplate capacity. This quantity will be negative if the retired equipment has a total nameplate capacity larger than the total nameplate capacity of the new equipment. "Total nameplate capacity" refers to the full and proper SF ₆ charge of the equipment rather than to the actual charge, which may reflect leakage.
b.	Emissions shall be calculated as follows:
	Emissions (tons CO_2e) = [($V_{iby} - V_{iey}$) + ($PA_{ped} + PA_e + PA_{rre}$) - ($SD_{op} + SD_{rs} + SD_{elf} + SD_{sor}$) - ($CNP_{ne} - CNP_{rse}$)] x $GWP/2000$
	Where (all SF_e values in lbs.):
	V_{iby} = SF_6 inventory in cylinders, gas carts, and other storage containers (not SF_6 containing operating equipment) at the beginning of the reporting year
	V _{iey} = SF ₆ inventory in cylinders, gas carts, and other storage containers (not SF ₆ containing operating equipment) at the end of the reporting year
	PA _{ped} = SF ₆ purchased from suppliers or distributors in cylinders
	PA _e = SF ₆ provided by equipment manufacturers with or inside SF ₆ -containing operating equipment
	PA _{rre} = SF _e returned to the reporting entity after off site recycling
	SD_{ep} = Sales of SF_e to other parties, including gas left in SF_e - containing operating equipment that is sold
	SD _{rs} = Returns of SF _e to supplier (producer or distributor)
	SD _{ef} = SF ₆ sent to destruction facilities

- SD_{sor} = SF₆ sent off site for recycling CNP_{ne} = Total SF₆ nameplate capacity of new SF₆ containing operating equipment at proper full charge CNP_{rse} = Total SF₆ nameplate capacity of retired or sold SF₆containing operating equipment at proper full charge GWP = CO₂e global warming potential of SF₆ (22,800) As part of the consistency application required pursuant to § 46.17(.3)(B) and (C) of this Part, and in annual monitoring and verification reports required pursuant to § 46.17.(6)(B) and (C) of this Part, the project sponsor shall provide the documentationrequired in § 46.17_.(4)(B)(5)(a) through (c) of this Part to support emissions calculations. Calculating emissions reductions. Emissions reductions shall representthe annual entity wide emissions reductions of SF₆ for the reporting entity, relative to emissions in the baseline year. Emissions reductions shall be determined as follows, using the quantification method outlined in § 46.17. (4)(B)(3)(b) of this Part to determine emissions in both the baseline yearand reporting year(s): Emissions Reduction (tons CO₂e) = (Total Pounds of SF₆-Emissions in Baseline Reporting Year) - (Total Pounds of SF₆ Emissions in Reporting Year) x GWP/2000 Where: GWP = CO₂e global warming potential of SF₆ (22,800) 5. Monitoring and verification requirements. The annual monitoring and verification report shall include supporting material detailing the calculations and data used to determine SF₆ emissions reductions and shall also provide the following documentation.
 - a. The project sponsor shall identify all facilities managed by the entity from which all SF₆-gas is procured and disbursed and maintain an entity wide log of all SF₆-gas procurements and disbursals. The entity wide log shall include the weight of each cylinder transported before shipment from the facilities and the weight of each cylinder

after return to the facilities. A specific cylinder log shall also be maintained for each cylinder that is used to fill equipment with SF_6 or reclaim SF_6 from equipment. The cylinder log shall be retained with the cylinder and indicate the location and specific identifying information of the equipment being filled, or from which SF_6 is reclaimed, and the weight of the cylinder before and after this activity. The cylinder log shall be returned with the cylinder to the facility when the activity is complete or the cylinder is empty.

- b. A current entity wide inventory of all SF₆-containing operating equipment and all other SF₆-related items, including cylinders, gascarts, and other storage containers used by the entity. The inventory shall be certified by an independent verifier accredited pursuant to § 46.17(.5).
- c. The project sponsor shall provide a monitoring and verification planas part of the consistency application, which shall include an SF₆-inventory management and auditing protocol and a process for quality assurance and quality control of inventory data. The monitoring and verification plan shall be certified by an independent verifier accredited pursuant to § 46.17(.5).
- C. Sequestration of carbon due to reforestation, improved forest management, or avoided conversion. To qualify for the award of CO₂-offset allowances under § 46.17 of this Part, offset projects that involve reforestation, improved forest management or avoided conversion shall meet all requirements of § 46.17(<u>.</u>4)(C) of this Part and the forest offset protocol, and all other applicable requirements of § 46.17 of this Part:
 - 1. Eligibility. Eligible forest offset projects shall satisfy all eligibility requirements of the forest offset protocol and this subpart.
 - 2. Offset project description. The offset project sponsor shall provide a detailed narrative of the offset project actions to be taken, including documentation that the offset project meets the eligibility requirements of § 46.17.(4)(C)(1) of this Part. The offset project description must include all information identified in § 8.1 and § 9.1 of the forest offset protocol, and any other information deemed necessary by the Department.

- 3. Carbon sequestration baseline determination. Baseline onsite carbon stocks shall be determined as required by §§ 6.1.1, 6.1.2, 6.2.1, 6.2.2, 6.2.3, 6.3.1, and 6.3.2 of the forest offset protocol, as applicable.
- 4. Calculating carbon sequestered. Net GHG reductions and GHG removal enhancements shall be calculated as required by section 6 of the forest offset protocol. The project's risk reversal rating shall be calculated as required by Appendix D of the forest offset protocol.
- 5. Monitoring and verification requirements. Monitoring and verification is subject to the following requirements:
 - a. Monitoring and verification reports shall include all forest offset project data reports submitted to the Department, including any additional data required by § 9.2(2) of the forest offset protocol.
 - b. The consistency application shall include a monitoring and verification plan certified by an independent verifier accredited pursuant to § 46.17.(5) of this Part. The monitoring and verification plan shall consist of a forest carbon inventory program, as required by § 8.1 of the forest offset protocol.
 - c. Monitoring and verification reports shall be submitted not less than every six (6) years, except that the first monitoring and verification report for reforestation projects must be submitted within twelve years of project commencement.
- 6. Forest Offset Project Data Reports. A project sponsor shall submit a forest offset project data report to the Department for each reporting period.

 Each forest offset project data report must cover a single reporting period.

 Reporting periods must be contiguous; there must be no gaps in reporting once the first reporting period has commenced.
- 7. Prior to the award of CO₂ offset allowances pursuant to § 46.17_(6), or to any surrender of allowances pursuant to § 46.17_(4)(C)(8), any quantity expressed in metric tons, or metric tons of CO₂ equivalent, shall be converted to tons using the conversion factor specified in § 46.5_of this Part.
- 8. Carbon sequestration permanence. The offset project shall meet the following requirements to address reversals of sequestered carbon.

- a. Unintentional reversals. Requirements for unintentional reversals are as follows:
 - (1) The project sponsor must notify the Department of the reversal and provide an explanation for the nature of the unintentional reversal within thirty (30) calendar days of its discovery; and
 - (2) The project sponsor must submit to Department a verified estimate of current earbon stocks within the offset project boundary within one year of the discovery of the unintentional reversal.
- b. Intentional Reversals. Requirements for intentional reversals are as follows:
 - (1) If an intentional reversal occurs, the project sponsor shall, within thirty (30) calendar days of the intentional reversal:
 - (AA) Provide notice, in writing, to the Department of the intentional reversal; and
 - (BB) Provide a written description and explanation of the intentional reversal to the Department.
 - (2) Within one year of the occurrence of an intentional reversal, the project sponsor shall submit to the Department a verified estimate of current carbon stocks within the offset project boundary.
 - (3) If an intentional reversal occurs, and CO₂ offset allowances have been awarded to the offset project, the forest owner must surrender to the Department or its agent for retirement a quantity of CO₂ allowances corresponding to the quantity of CO₂ equivalent tons reversed within six months of notification by the Department.
 - (AA) Notification by the Department will occur after the verified estimate of carbon stocks has been submitted to the Department, or after one year has elapsed since the occurrence of the reversal if the project sponsor fails to submit the verified estimate of carbon stocks.

- (BB) If the forest owner does not surrender valid CO₂-allowances to the Department within six months of notification by the Department, the forest owner will-be subject to enforcement action and each CO₂-equivalent ton of carbon sequestration reversed will-constitute a separate violation of this Part and applicable state law.
- (4) Project Termination. Requirements for project termination are as follows:
 - (AA) The project sponsor must surrender to the Department or its agent for retirement a quantity of CO₂-Allowances in the amount calculated pursuant to project termination provisions in the forest offset protocol within six (6) months of project termination.
 - (BB) If the project sponsor does not surrender to the Department or its agent a quantity of CO₂ Allowances in the amount calculated pursuant to project termination provisions in the forest offset protocolwithin six months of project termination, they will be subject to enforcement action and each CO₂ offset allowance not surrendered will constitute a separate violation of this Part and applicable state law
- c. Disposition of forest sequestration projects after a reversal. If a reversal lowers the forest offset project's actual standing live carbon stocks below its project baseline standing live carbon stocks, the forest offset project will be terminated by the Department.
- 9. Timing of forest offset projects. The Department may award CO₂ offset allowances under § 46.17.(6) of this Part, only for forest offset projects that are initially commenced on or after January 1, 2014.
- 10. Projects that Have Been Awarded Credits by a Voluntary Greenhouse Gas Reduction Program. The provisions of § 46.8_(3)(H) and § 46.17(_3) (B)(2) of this Part, shall not apply to forest projects that have been awarded credits under a voluntary greenhouse gas reduction program provided that the following conditions are satisfied. For such projects, the number of CO₂ Offset Allowances will be calculated pursuant to the requirements of § 46.17_(4)(C) of this Part, without regard to quantity of credits that were awarded to the project under the voluntary program.

- a. The project satisfies all other general requirements of § 46.17, including all specific requirements of § 46.17.(4)(C), for all reporting periods for which the project has been awarded credits under a voluntary greenhouse gas program and also intends to be awarded CO₂-offset allowances pursuant to § 46.17.(6) of this Part.
- b. At the time of submittal of the consistency application for the project, the project submits forest offset data reports and a monitoring and verification report covering all reporting periods for which the project has been awarded credits under a voluntary greenhouse gas program and also intends to be awarded CO₂-offset allowances pursuant to § 46.17.(6) of this Part. Forest offset data reports and monitoring and verification reports must meet all requirements of § 46.17.(4)(C)(5) and (6) of this Part.
- c. The consistency application includes information sufficient to allow the Department to make the following determinations, and the voluntary greenhouse gas program has published information on its website to allow the Department to verify the information included in the consistency application.
 - (1) The offset project has met all legal and contractual requirements to allow it to terminate its relationship with the voluntary greenhouse gas program, and such termination has been completed.
 - (2) The project sponsor or voluntary greenhouse gas program-has cancelled or retired all credits that were awarded for carbon sequestration that occurred during the time periods for which the project intends to be awarded CO₂ offset allowances pursuant to § 46.17(<u>.</u>6) of this Part, and such credits were cancelled or required for the sole purpose of allowing the project to be awarded CO₂ offset allowances pursuant to § 46.17(<u>.</u>6) of this Part.
- D. Reduction or avoidance of CO₂ emissions from natural gas, oil, or propane enduse combustion due to end use energy efficiency. To qualify for the award of CO₂ offset allowances under § 46.17 of this Part, offset projects that reduce CO₂ emissions by reducing on site combustion of natural gas, oil, or propane for enduse in an existing or new commercial or residential building by improving the

energy efficiency of fuel usage and/or the energy efficient delivery of energy services shall meet the requirements of § 46.17_(4)(D) and all other requirements of § 46.17_of this Part. Eligible new buildings are limited to new buildings that are designed to replace an existing building on the offset project site, or new buildings designed to be zero net energy buildings.

1. Eligibility

- a. Eligible offset projects shall reduce CO₂ emissions through one or more of the following energy conservation measures (ECMs):
 - (1) Improvements in the energy efficiency of combustion equipment that provide space heating and hot water, including a reduction in fossil fuel consumption through the use of solar and geothermal energy;
 - (2) Improvements in the efficiency of heating distribution systems, including proper sizing and commissioning of heating systems;
 - (3) Installation or improvement of energy management systems;
 - (4) Improvement in the efficiency of hot water distribution systems and reduction in demand for hot water;
 - (5) Measures that improve the thermal performance of the building envelope and/or reduce building envelope air leakage;
 - (6) Measures that improve the passive solar performance of buildings and utilization of active heating systems using renewable energy; and
 - (7) Fuel switching to a less carbon intensive fuel for use in combustion systems, including the use of liquid or gaseous eligible biomass, provided that conversions to electricity are not eligible.

Performance standards

- (1) All end use energy efficiency offset projects. All offset projects under this subsection shall meet the applicable performance criteria set forth below:
 - (AA) Installation best practice. Any combustion equipment and related air handling equipment (HVAC systems) installed as part of an offset project shall be sized and installed in accordance with the applicable requirements and specifications outlined in (i) and (ii) below:
 - (i) Commercial HVAC systems shall meet the applicable sizing and installation requirements of ANSI/ASHRAE/IESNA Standard 90.1 (SI Edition) 2010: Energy Standard for Buildings Except Low Rise Residential Buildings and ANSI/ASHRAE Standard 62.2 2010: Ventilation for Acceptable Indoor Air Quality.
 - (ii) Residential HVAC systems shall meet the applicable sizing specifications of Air-Conditioner Contractors of America (ACCA)-Manual J: Residential Load Calculation (Eighth Edition Full), and the applicable installation-specifications ANSI/ACCA 5 QI 2007 "HVAC-Quality Installation Specification".
 - (AA) Whole building energy performance. Eligible newbuildings or whole building retrofits that are part of anoffset project shall meet the requirements in (i) and (ii) below:
 - (i) Commercial buildings shall exceed the energy-performance requirements of ANSI/ASHRAE/IESNA 90.1 (SI Edition) 2010: Energy Standard for Buildings Except Low-Rise Residential Buildings by thirty percent (30%), with the exception of multi-family residential buildings classified as commercial by ANSI/ASHRAE/IESNA Standard 90.1 (SI Edition) 2010, which shall exceed these energy performance requirements by twenty percent (20%).

- (ii) Residential buildings shall exceed the energyperformance requirements of the 2012-International Energy Conservation Code Supplement by thirty percent (30%).
- (2) Maximum market penetration rate for offset projects commenced on or after January 1, 2009. For offset projects initiated on or after January 1, 2009, the project sponsor shall demonstrate, to the satisfaction of the Department, that the energy conservation measures implemented as part of the offset project have a market penetration rate of less than five percent (5%).
- 2. Offset project description. The offset project sponsor shall provide a detailed narrative of the offset project actions to be taken, including documentation that the offset project meets the eligibility requirements of § 46.17.(4)(D)(1) of this Part. The offset project narrative shall include the following information:
 - a. The location and specifications of the building(s) where the offset project actions will occur;
 - b. The owner and operator of the building(s);
 - c. The parties implementing the offset project, including leadcontractor(s), subcontractors, and consulting firms;
 - d. Specifications of equipment and materials to be installed as part of the offset project; and
 - e. Building plans and offset project technical schematics, as applicable.
- 3. Emissions baseline determination. The emissions baseline shall be determined in accordance with the requirements of this subsection, based on energy usage (MMBtu) by fuel type for each energy conservation measure, derived using historic fuel use data from the most recent calendar year for which data is available, and multiplied by an emissions factor and oxidation factor for each respective fuel in § 46.17.(4)(D)(1)(b) (3) (Table 2) belowof this Part.

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Table 2:	Emiccione	and	Ovidation	Factors

<u>Fuel</u>	Emissions Factor (lbs. CO ₂ /MMBtu)	Oxidation Factor
Natural Gas	116.98	0.995
Propane	139.04	0.995
Distillate Fuel Oil	161.27	0.99
Kerosene	159.41	0.99

a. Isolation of applicable energy conservation measure baseline. The baseline energy usage of the application to be targeted by the energy conservation measure shall be isolated in a manner consistent with the guidance at § 46.17.(4)(D)(5) of this Part.

b. Annual baseline energy usage shall be determined as follows:

Energy Usage (MMBtu) = BEU_{AEGM} x A

Where:

BEU_{AECM} = Annual pre installation baseline energy use by fuel type (MMBtu) attributable to the application(s) to be targeted by the

energy conservation measure(s). If applicable building codes or equipment standards require that equipment or materials installed as part of the offset project meet certain minimum energy performance requirements, baseline energy usage for the application shall assume that equipment or materials are installed that meet such minimum requirements. For offset projects that replace existing combustion equipment, the assumed minimum energy performance required by applicable building codes or equipment standards shall be that which applies to new equipment that uses the same fuel type as the equipment being replaced.

Baseline energy usage shall be determined in accordance with the applicable requirements at § 46.17.(4)(D)(5) of this Part.

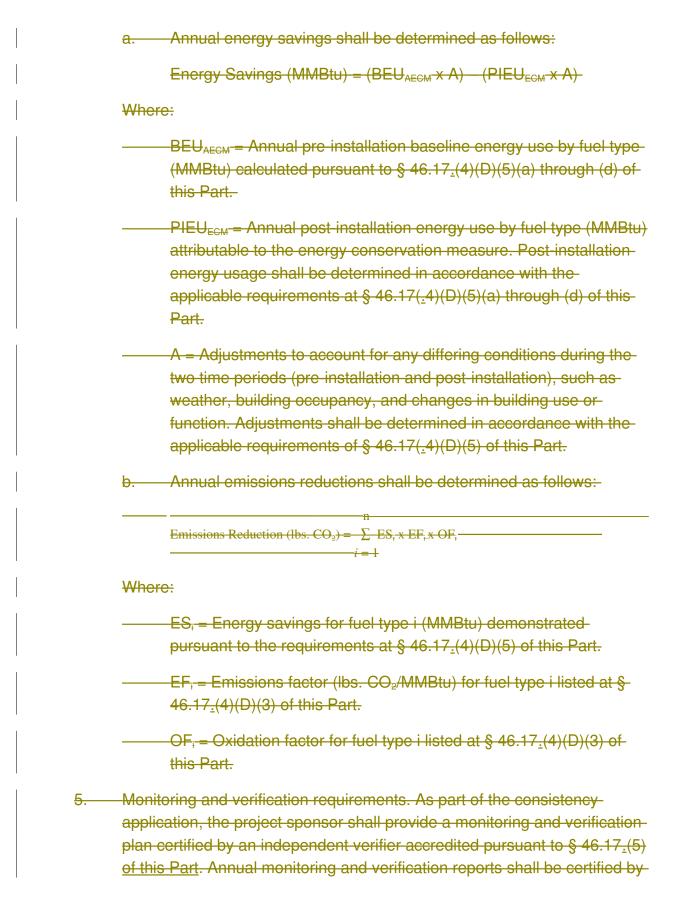
A = Adjustments to account for differing conditions during the twotime periods (pre-installation and post-installation), such asweather, building occupancy, and changes in building use orfunction. Adjustments shall be determined in accordance with the applicable requirements at § 46.17₋(4)(D)(5) of this Part.

c. Annual baseline emissions shall be determined as follows:

$$\frac{\text{n}}{\text{Emissions (lbs. CO}_2)} = \sum_{i=1}^{\infty} \frac{\text{BEU}_i \times \text{EF}_i \times \text{OF}_i}{i = 1}$$

Where:

- BEU, = Annual baseline energy usage for fuel type i (MMBtu)
 demonstrated pursuant to the requirements in § 46.17(<u>.</u>4)(D)(5)(a)
 through (d) of this Part.
- EF_i = Emissions factor (lbs. CO₂/MMBtu) for fuel type i listed at § 46.17_.(4)(D)(3) of this Part.
- OF, = Oxidation factor for fuel type i listed at § 46.17(<u>.</u>4)(D)(3), of this Part.
- 4. Calculating emissions reductions. Emissions reductions shall be determined based upon annual energy savings by fuel type (MMBtu) for each energy conservation measure, multiplied by the emissions factor and oxidation factor for the respective fuel type at § 46.17.(4)(D)(3), of this Part.



an independent verifier accredited pursuant to § 46.17.(5) of this Part. Independent verifiers must conduct a site audit when reviewing the first monitoring and verification report submitted by the project sponsor, except for offset projects that save less than 1,500 MMBtu per year. For offset projects that save less than 1,500 MMBtu per year, the project sponsor must provide the independent verifier with equipment specifications and copies of equipment invoices and other relevant offset project related invoices. All offset project documentation, including the consistency application and monitoring and verification reports, shall be signed by a Professional Engineer, identified by license number. Monitoring and verification shall also meet the following requirements.

- a. General energy measurement and verification requirements.

 Monitoring and verification of energy usage shall be demonstrated through a documented process consistent with the following protocols and procedures, as applicable.
 - (1) For existing commercial buildings, determination of baseline energy usage shall be consistent with the International Performance Measurement & Verification Protocol, Volume I: Concepts and Options for Determining Energy and Water Savings (IPMVP), "Option B. Retrofit Isolation" and "Option D. Calibrated Simulation." If a building project involves only energy conservation measures implemented as part of a CO2 emissions offset project, a process consistent with IPMVP "Option C. Whole Facility" may be used, as applicable. Application of the IPMVP general guidance shall be consistent with the applicable detailed specifications in ASHRAE Guideline 14-2002, Measurement of Energy and Demand Savings.
 - (2) For new commercial buildings, determination of baseline-energy usage shall be consistent with the International Performance Measurement & Verification Protocol, Volume-III: Concepts and Options for Determining Energy Savings in New Construction (IPMVP), "Option D. Calibrated Simulation." Application of the IPMVP general guidance shall be consistent with the applicable detailed specifications in

- ASHRAE Guideline 14 2002, Measurement of Energy and Demand Savings.
- (3) For existing and new residential buildings, determination of baseline energy usage shall be consistent with the requirements of the RESNET National Energy Rating—Technical Standards and National Home Energy Rating—Technical Guidelines, 2013 (Chapter 3 and Appendix A of Mortgage Industry National Home Energy Rating System—Standards).
- -Isolation of applicable energy conservation measure. In calculatingboth baseline energy usage and energy savings, the applicant shall isolate the impact of each eligible energy conservation measure (ECM), either through direct metering or energy simulationmodeling. For offset projects with multiple ECMs, and whereindividual ECMs can affect the performance of others, the sum of energy savings due to individual ECMs shall be adjusted to account for the interaction of ECMs. For commercial buildings, this process shall be consistent with the requirements of ASHRAE Guideline 14 2002, Measurement of Energy and Demand Savings, and ANSI/ASHRAE/IESNA Standard 90.1 (SI Edition) 2010: Energy-Standard for Buildings Except Low-Rise Residential Buildings. Forresidential buildings, this process shall be consistent with the requirements of RESNET (Residential Energy Services Network, Inc.) and the National Home Energy Rating Technical Guidelines, 2006 Mortgage Industry National Home Energy Rating System-Standards, Chapter 3, National Energy Rating Technical Standards and Appendix A, National Home Energy Rating Technical Guidelines, On-Site Inspection Procedures for Minimum Rated Features, 2006, and adopted enhancements dated 2007-2012.
 - (1) Reductions in energy usage due to the energy conservation—
 measure shall be based upon actual energy usage data.

 Energy simulation modeling shall only be used to determine—
 the relative percentage contribution to total fuel usage (for—
 each respective fuel type) of the application targeted by the—
 energy conservation measure.

c. Calculation of energy savings. Annual energy savings are to be determined based on the following:

Energy Savings (MMBtu) = (BEU_{AECM} x A) - (PIEU_{ECM} x A)

Where:

BEU_{AECM} = Annual pre installation baseline energy use by fuel type-(MMBtu) attributable to the application(s) to be targeted by the energy conservation measure(s), based upon annual fuel usagedata for the most recent calendar year for which data is available. For new buildings, baseline energy use for a reference buildingequivalent in basic configuration, orientation, and location to the building in which the eligible energy conservation measure(s) isimplemented shall be determined according to ASHRAE Guideline-14-2002, Measurement of Energy and Demand Savings and ANSI/ASHRAE/IESNA Standard 90.1 (SI Edition) 2010, Section 11 and Appendix G. Where energy simulation modeling is used toevaluate an existing building, modeling shall be conducted inaccordance with ASHRAE Guideline 14-2002, Measurement of Energy and Demand Savings, and ANSI/ASHRAE/IESNA Standard 90.1 (SI Edition) 2010, Section 11 and Appendix G. For existing and new residential buildings, energy simulation modeling shall beconducted in accordance with the requirements of RESNET-(Residential Energy Services Network, Inc.) and the National Home Energy Rating Technical Guidelines, 2006 Mortgage Industry National Home Energy Rating System Standards, Chapter 3, National Energy Rating Technical Standards and Appendix A, National Home Energy Rating Technical Guidelines, On-Site-Inspection Procedures for Minimum Rated Features, 2006 and adopted enhancements dated 2007-2012;

PIEU_{ECM} = Annual post installation energy use by fuel type (MMBtu) attributable to the energy conservation measure, to be verified based on annual energy usage after installation of the energy conservation measure(s), consistent with the requirements of ASHRAE Guideline 14-2002, Measurement of Energy and Demand Savings. Where energy simulation modeling is used to evaluate a new or existing building, modeling shall be conducted in

accordance with ASHRAE Guideline 14 2002, Measurement of Energy and Demand Savings, and ANSI/ASHRAE/IESNA Standard 90.1 (SI Edition) 2010, Section 11 and Appendix G. For existing and new residential buildings, energy simulation modeling shall be consistent with the requirements of RESNET (Residential Energy Services Network, Inc.) and the National Home Energy Rating Technical Guidelines, 2006 Mortgage Industry National Home Energy Rating System Standards, Chapter 3, National Energy Rating Technical Standards and Appendix A, National Home Energy Rating Technical Guidelines, On Site Inspection Procedures for Minimum Rated Features, 2006 and adopted enhancements dated 2007-2012.

A = Adjustments to account for any differing conditions during the two time periods (pre-installation and post-installation), such asweather (weather normalized energy usage based on heating and cooling degree days), building occupancy, and changes in buildinguse or function. For commercial buildings, adjustments shall be consistent with the specifications of ASHRAE Guideline 14-2002, Measurement of Energy and Demand Savings, and ANSI/ASHRAE/IESNA Standard 90.1 (SI Edition) 2010, Section 11 and Appendix G. For residential buildings, adjustments shall be consistent with the specifications of RESNET (Residential Energy-Services Network, Inc.) and the National Home Energy Rating-Technical Guidelines, 2006 Mortgage Industry National Home-Energy Rating System Standards, Chapter 3, National Energy-Rating Technical Standards and Appendix A, National Home-Energy Rating Technical Guidelines, On-Site Inspection Procedures for Minimum Rated Features, 2006 and adopted enhancements dated 2007-2012.

d. Provision for sampling of multiple like offset projects in residential buildings. Offset projects that implement similar measures in multiple residential buildings may employ representative sampling of buildings to determine aggregate baseline energy usage and energy savings. Sampling protocols shall employ sound statistical methods such that there is ninety five percent (95%) confidence that the reported value is within ten percent (10%) of the true mean.

Any sampling plan shall be certified by an independent verifier, accredited pursuant to § 46.17(5).

E. Avoided methane emissions from agricultural manure management operations.

To qualify for the award of CO₂ offset allowances under § 46.17 of this Part,
offset projects that capture and destroy methane from animal manure and
organic food waste using anaerobic digesters shall meet the requirements of §
46.17 (4)(E) and all other applicable requirements of § 46.17 of this Part:

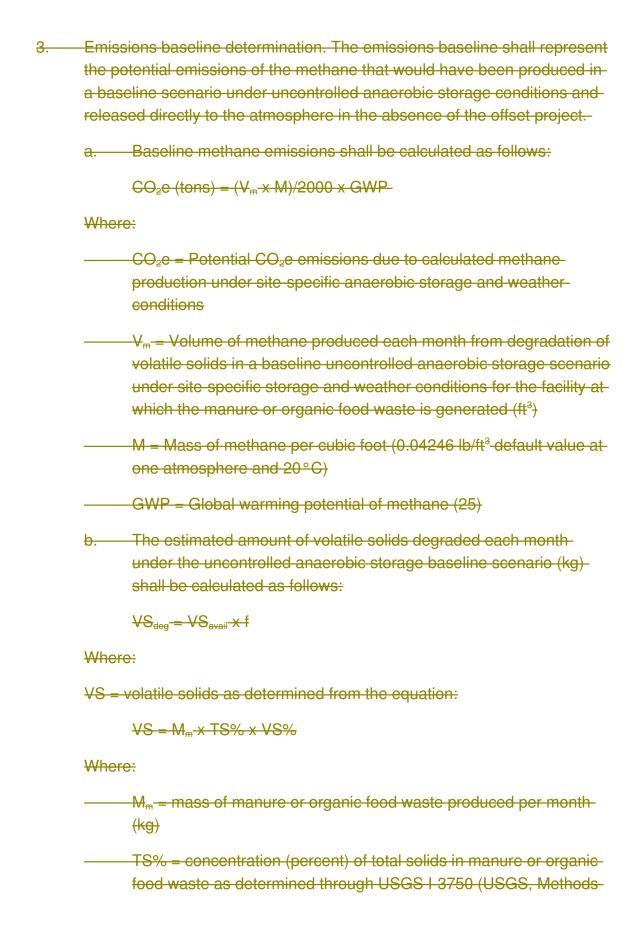
1. Eligibility

- a. Eligible offset projects shall consist of the destruction of that portion of methane generated by an anaerobic digester that would have been generated in the absence of the offset project through the uncontrolled anaerobic storage of manure or organic food waste that would have been stored under anaerobic conditions in the absence of the offset project.
- b. Eligible offset projects shall employ only manure based anaerobic digester systems using livestock manure as the majority of digester-feedstock, defined as more than fifty percent (50%) of the mass input into the digester on an annual basis. Organic food waste used by an anaerobic digester shall only be that which would have been stored in anaerobic conditions in the absence of the offset project.
- c. The provisions of § 46.17(<u>.</u>2)(C)(2) and (3) of this Part shall not apply to agricultural manure management offset projects provided either of the following requirements are met.
 - (1) The offset project is located in a state that has a market penetration rate for anaerobic digester projects of five percent (5%) or less. The market penetration determination shall utilize the most recent market data available at the time of submission of the consistency application pursuant to § 46.17.(3) of this Part, and shall be determined as follows:

MP (%) = MG_{AD} / MG_{STATE}

Where:

- MG_{AD} = Average annual manure generation for the number of dairy cows and swine serving all anaerobic digester projects in the applicable state at the time of submission of a consistency application pursuant to § 46.17.(3) of this Part.
- MG_{STATE} = average annual manure production of all dairy cows and swine in the state at the time of submission of a consistency application pursuant to §46.17.(3) of this Part.
 - (2) The project is located at a farm with 4,000 or less head of dairy cows, or a farm with equivalent animal units, assuming an average live weight for dairy cows (lbs./cow) of 1,400 lbs., or, if the project is a regional type digester, total annual manure input 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, assuming an average live weight for dairy cows (lbs./cow) of 1,400 lbs.
- 2. Offset project description. The project sponsor shall provide a detailed-narrative of the offset project actions to be taken, including documentation-that the offset project meets the eligibility requirements of § 46.17.(4)(E)(1) of this Part. The offset project narrative shall include the following information:
 - a. The owner and operator of the offset project;
 - The location and specifications of the facility where the offset project will occur;
 - c. The owner and operator of the facility where the offset project willoccur;
 - d. The specifications of the equipment to be installed and a technical schematic of the offset project; and
 - e. The location and specifications of the facilities from which anaerobic digester influent will be received, if different from the facility where the offset project will occur.



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for the Determination of Inorganic Substances in Water and Fluvial-

 T_2 = average monthly ambient temperature for facility where manure or organic food waste is generated (converted fromdegrees Celsius to degrees Kelvin) as determined from the nearest-National Weather Service certified weather station (if T₂ > 5 °C; if T₂ $< 5^{\circ}$ C, then F = 0.104); $T_{+} = 303.15 (30 ^{\circ} \text{C converted to } ^{\circ} \text{K})$ GC = ideal gas constant (1.987 cal/K mol) The volume of methane produced (ft³) from degradation of volatile solids shall be calculated as follows: $V_m = (VS_{dea} \times B_a) \times 35.3147 \text{ ft}^3/\text{m}^3$ Where: ──V_m = volume of methane (ft³) VS_{dea} = volatile solids degraded (kg) B_e = manure or organic food waste type-specific maximum methane generation constant (m³ CH₄/kg VS degraded). For dairy cowmanure, B₀ = 0.24 m³ CH₄/kg VS degraded. The methanegeneration constant for other types of manure shall be those citedat U.S. EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2010, Annex 3, Table A-162 (U.S. EPA, April 2012), unless the project sponsor proposes an alternate methanegeneration constant. If the project sponsor proposes to use a

4. Calculating emissions reductions. Emissions reductions shall be determined based on the potential emissions (in tons of CO₂e) of the methane that would have been produced in the absence of the offset project under a baseline scenario that represents uncontrolled anaerobic storage conditions, as calculated pursuant to § 46.17.(4)(E)(3)(a) through (c) of this Part, and released directly to the atmosphere. Emissions reductions may not exceed the potential emissions of the anaerobic digester, as represented by the annual volume of methane produced by

and documentation to the Department.

methane generation constant other than the ones found in the

above-cited reference, the project sponsor must provide justification

the anaerobic digester, as monitored pursuant to § $46.17_{\underline{.}}(4)(E)(5)$ of this Part. If the project is a regional type digester, CO_2 emissions due to transportation of manure and organic food waste from the site where the manure and organic food waste was generated to the anaerobic digester-shall be subtracted from the emissions reduction calculated pursuant to § $46.17_{\underline{.}}(4)(E)(3)(a)$ through (c) of this Part. Transportation related CO_2 emissions shall be determined through one of the following methods.

- a. Documentation of transportation fuel use for all shipments of manure and organic food waste from off-site to the anaerobic digester during each reporting year and a log of transport miles for each shipment. CO₂ emissions shall be determined through the application of an emissions factor for the fuel type used. If this option is chosen, the following emissions factors shall be applied as appropriate:
 - (1) Diesel fuel: 22.912 lbs. CO₂/gallon.
 - (2) Gasoline: 19.878 lbs. CO₂/gallon.
 - (3) Other fuel: submitted emissions factor approved by the Department.
- b. Documentation of total tons of manure transported from off-site for-input into the anaerobic digester during each reporting year, as monitored pursuant to § 46.17.(4)(E)(5)(a) of this Part, and a log of transport miles for each shipment. CO₂ emissions shall be determined through the application of a ton-mile transport emission-factor for the fuel type used. If this option is chosen, the following emissions factors shall be applied as appropriate for each ton of manure delivered, and multiplied by the number of miles transported.
 - (1) Diesel fuel: 0.131 lbs. CO₂ per ton mile,
 - (2) Gasoline: 0.133 lbs. CO₂ per ton-mile, or
 - (3) Other fuel: submitted emissions factor approved by the Department.

- 5. Monitoring and verification requirements. Offset projects shall employ a system that provides metering of biogas volumetric flow rate and determination of methane concentration. Annual monitoring and verification reports shall include monthly biogas volumetric flow rate and methane concentration determination. Monitoring and verification shall also meet the following requirements.
 - a. If the offset project is a regional type digester, manure and organic food waste from each distinct source supplying to the anaerobic digester shall be sampled monthly to determine the amount of volatile solids present. Any emissions reduction will be calculated according to mass of manure (kg) and organic food waste (kg) being digested and percentage of volatile solids present before digestion, consistent with the requirements of § 46.17_(4)(E)(3) and § 46.17_(4)(E)(5)(c) of this Part, and apportioned accordingly. The project sponsor shall provide supporting material and receipts tracking the monthly receipt of manure (kg) and organic food waste (kg) used to supply the anaerobic digester from each manure supplier.
 - b. If the offset project includes the digestion of organic food wasteeligible pursuant to § 46.17_(4)(E)(1)(b) of this Part, organic foodwaste shall be sampled monthly to determine the amount of volatile solids present before digestion, consistent with the requirements of § 46.17_(4)(E)(3) and § 46.17_(4)(E)(5)(c) of this Part, and apportioned accordingly.
 - e. The project sponsor shall submit a monitoring and verification planas part of the consistency application that includes a quality assurance and quality control program associated with equipment used to determine biogas volumetric flow rate and methane composition. The monitoring and verification plan shall be specified in accordance with the applicable monitoring requirements listed in § 46.17(_4)(E)(5)(d) (Table 3) below of this Part. The monitoring and verification plan shall also include provisions for ensuring that measuring and monitoring equipment is maintained, operated, and calibrated based on manufacturer's recommendations, as well as provisions for the retention of maintenance records for audit purposes. The monitoring and verification plan shall be certified by

an independent verifier accredited pursuant to § 46.17.(5) of this Part.

- d. The project sponsor shall verify biogas methane composition quarterly through gas sampling and third party laboratory analysis using applicable U.S. EPA test methods.
 - (1) Table 3: Input Monitoring Requirements

Input Parameter	Measurement Unit	Frequency of Sampling	Sampling Method(s)
Influent flow (mass) into the digester	Kilograms (kg) per month (wet- weight)	Monthly total- into the digester	a) Recorded weight
			b) Digester influent pump flow
			c) Livestock population and application of American Society of Agricultural and Biological Engineers (ASABE) standard (ASAE D384.2, March 2005)
Influent total solids concentration (TS)	Percent (of sample)	Monthly, depending upon recorded variations	USGS, Methods for the Determination of Inorganic Substances in Water and Fluvial Sediments, Techniques of Water Resources Investigations of the United States Geological Survey, Book 5, Chapter A1, Method Number I 3750, "Solids, residue on evaporation at 105 degrees C, total, gravimetric"
Influent volatile solids (VS) concentration	Percent (of TS)	Monthly, depending upon recorded variations	USEPA Method Number 160.4, Methods for the Chemical Analysis of Water and Wastes (MCAWW) (EPA/600/4-79/020)

Average monthly ambient temperature	Temperature °G	Monthly (based on- farm-	Closest National Weather Service certified weather station
		averages)	

46.17.5 Accreditation of independent verifiers

- A. Standards for accreditation. Independent verifiers must be accredited by the Department to provide verification services as required of project sponsors under this section, after meeting all of the requirements of this subsection.
 - 1. Verifier minimum requirements. Each accredited independent verifier shall demonstrate knowledge of the following topics:
 - a. Utilizing engineering principles;
 - D. Quantifying greenhouse gas emissions;
 - c. Developing and evaluating air emissions inventories:
 - d. Auditing and accounting principles;
 - e. Knowledge of information management systems;
 - f. Knowledge of the requirements of this section and other applicable requirements of this regulation; and
 - g. Such other qualifications as may be required by the Department to provide competent verification services as required for individual offset categories specified at § 46.17.(4) of this Part.
 - 2. Organizational qualifications. Accredited independent verifiers shall demonstrate that they meet the following requirements:
 - a. Verifiers shall have no direct or indirect financial relationship,
 beyond a contract for provision of verification services, with any
 offset project developer or project sponsor;

- b. Verifiers shall employ staff with knowledge, experience, and where appropriate professional licenses relevant to the specific category(ies) of offset projects in § 46.17.(4) of this Part, that they seek to verify;
- e. Verifiers shall hold a minimum of one million U.S. dollars of professional liability insurance. If the insurance is in the name of a related entity, the verifier shall disclose the financial relationship between the verifier and the related entity, and provide documentation supporting the description of the relationship; and
- d. Verifiers shall demonstrate that they have implemented an adequate management protocol to identify potential conflicts of interest with regard to an offset project, offset project developer, or project sponsor, 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 pursuant to § 46.17(_3)(E) of this Part, and remedy any such conflicts of interest prior to providing verification services.
- 3. Pre-qualification of verifiers. The Department may require prospective verifiers to successfully complete a training course, workshop, or test developed by the Department or its agent, prior to submitting an application for accreditation.
- B. Application for accreditation. An application for accreditation shall not contain any proprietary information, and shall include on a form prescribed by the Department the following:
 - 1. The applicant's name, address, e-mail address, telephone number, and facsimile transmission number (if any);
 - 2. Documentation that the applicant has at least two years of experience in each of the knowledge areas specified at § 46.17(.5)(A)(1)(a) through (e) of this Part, and as may be required pursuant to § 46.17.(5)(A)(1)(g) of this Part;
 - 3. Documentation that the applicant has successfully completed the requirements of § 46.17.(5)(A)(3) of this Part, as applicable;

- 4. A sample of at least one work product that provides supporting evidence that the applicant meets the requirements at § 46.17.(5)(A)(1) and (2) of this Part. The work product shall have been produced, in whole or part, by the applicant and shall consist of a final report or other material provided to a client under contract in previous work. For a work product that was jointly produced by the applicant and another entity, the role of the applicant in the work product shall be clearly explained;
- 5. Documentation that the applicant holds professional liability insurance as required pursuant to § 46.17.(5)(A)(2)(c) of this Part.
- 6. Documentation that the applicant has implemented an adequate management protocol to address and remedy any conflict of interest issues that may arise, as required pursuant to § 46.17.(5)(A)(2)(d) of this Part.
- C. Department action on applications for accreditation. The Department shall approve or deny a complete application for accreditation within forty-five (45) days after submission. Upon approval of an application for accreditation, the independent verifier shall be accredited for a period of three (3) years from the date of application approval.
- D. Reciprocity. Independent verifiers accredited in other participating states may be deemed to be accredited in Rhode Island, at the discretion of the Department.

E. Conduct of accredited verifiers

- 1. Prior to engaging in verification services for an offset project sponsor, the accredited verifier 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, or project sponsor. The accredited verifier shall disclose information concerning its ownership, past and current clients, related entities, as well as any other facts or circumstances that have the potential to create a conflict of interest.
- Accredited verifiers shall have an ongoing obligation to disclose to the
 Department any facts or circumstances that may give rise to a conflict of
 interest with respect to an offset project, offset project developer, or
 project sponsor.

- 3. The Department may reject a verification report and certification statement from an accredited verifier, submitted as part of a consistency application required pursuant to § 46.17(_3)(B) or submitted as part of a monitoring and verification report submitted pursuant to § 46.17_(6)(B) of this Part, if the Department determines that the accredited verifier has a conflict of interest related to the offset project, offset project developer, or project sponsor.
- 4. The Department may revoke the accreditation of a verifier at any time given cause, for 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 project sponsor;
 - 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 this subsection; and
 - d. Intentional misrepresentation of data or other intentional fraud.

46.17.6 Award and recordation of CO₂ offset allowances

- A. Quantities of CO₂ offset allowances awarded, and subsequently recorded
 - 1. Award of CO₂ offset allowances
 - a. CO₂-emissions offset projects. Following the issuance of a consistency determination under § 46.17_.(3)(E)(2) and the approval of a monitoring and verification report under the provisions of § 46.17_.(6)(E) of this Part, the Department or their designee shall award one CO₂-offset allowance for each ton of demonstrated reduction in CO₂ or CO₂-equivalent emissions or sequestration of CO₂-
 - 2. Recordation of CO₂ offset allowances. After CO₂ offset allowances are awarded under § 46.17.(6)(A)(1), the Department shall record such CO₂ offset allowances in the project sponsor's general account.
- B. Deadlines for submittal of monitoring and verification reports

- 1. For CO₂ emissions offset projects undertaken prior to January 1, 2009, the project sponsor must submit the monitoring and verification report covering the pre 2009 period on or before June 30, 2009.
- 2. For CO₂ emissions offset projects undertaken on or after January 1, 2009, the monitoring and verification report must be submitted within <u>six (6)</u> months following the completion of the last calendar year during which the offset project achieved CO₂ equivalent reductions or sequestration of CO₂-for which the project sponsor seeks the award of CO₂ offset allowances.
- C. Contents of monitoring and verification reports. For an offset project, the monitoring and verification report must include the following information.
 - 1. The project's sponsor's name, address, e-mail address, telephone-number, facsimile transmission number (if any), and account number.
 - 2. The CO₂ emissions reduction or CO₂ sequestration determination as required by the relevant provisions of § 46.17.(4) of this Part, including a demonstration that the project sponsor complied with the required quantification, monitoring, and verification procedures under § 46.17.(4), as well as those outlined in the consistency application approved pursuant to § 46.17.(3)(E)(2) of this Part.
 - 3. A signed statement by the offset project sponsor that reads:
 - "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 § 46.17 in Part 46 of this Subchapter (CO₂ Budget Trading Program). 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. I understand that eligibility for the award of CO₂ offset allowances under § 46.17 in Part 46 of this Subchapter (CO₂ Budget Trading Program) is contingent on meeting the requirements of § 46.17 of Part 46 of this Subchapter (CO₂ Budget Trading Program). I authorize 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. I understand 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. I submit to the legal jurisdiction of the State of Rhode Island."

- 4. A certification signed by the offset project sponsor certifying that all offset projects for which the sponsor has received offset allowances under this section or any similar provisions in the rules of other participating states that are under the sponsor's ownership or control, or under the ownership or control of any entity which controls, is controlled by, or has common control with the sponsor, are in compliance with all applicable requirements of the CO₂ Budget Trading Program in all participating states.
- 5. A verification report and certification statement signed by an independent verifier accredited pursuant to § 46.17.(5) of this Part, documenting that the independent verifier has reviewed the monitoring and verification report and evaluated the following in relation to the applicable requirements of § 46.17.(4) of this Part, and any applicable guidance issued by the Department.
 - a. The adequacy and validity of information supplied by the project sponsor to determine CO₂-emissions reductions or CO₂-sequestration pursuant to the applicable requirements of § 46.17.

 (4) of this Part.
 - b. The adequacy and consistency of methods used to quantify, monitor, and verify GO₂ emissions reductions and GO₂-sequestration in accordance with the applicable requirements in § 46.17.(4) and as outlined in the consistency application approved pursuant to § 46.17.(3)(E)(2) of this Part.
 - c. Any other evaluations and verification reviews required by the Department, to determine the adequacy and validity of information supplied by the project sponsor to demonstrate that the offset project meets the applicable eligibility requirements of § 46.17.(4_of_this Part).

- 6. Disclosure of any voluntary or mandatory programs, other than the CO₂-Budget Trading Program, to which greenhouse gas emissions data related to the offset project has been, or will be reported.
- 7. For offset projects located in a state or United States jurisdiction that is not a participating state, a demonstration that the project sponsor has complied with all requirements of the cooperating regulatory agency in the state or United States jurisdiction where the offset project is located.
- D. Prohibition against filing monitoring and verification reports in more than one participating state. Monitoring and verification reports may only be filed under § 46.17.(6) for projects that have received consistency determinations under § 46.17(.3)(E)(2) of this Part. Monitoring and verification reports may not be filed under § 46.17.(6) of this Part, for projects that have received consistency determinations in other participating states.
- E. Department's action on monitoring and verification reports. The Department shall approve or deny a complete monitoring and verification report, in a format approved by the Department, filed with the Department pursuant to § 46.17.(6) (D) of this Part, within ninety (90) days following receipt of a complete report. A complete monitoring and verification report is one that is in an approved form and is determined by the Department to be complete for the purpose of commencing review of the monitoring and verification report. In no event shall a completeness determination prevent the Department from requesting additional information in order to enable the Department to approve or deny a monitoring and verification report submitted in a format approved by the Department, and filed under § 46.17.(6) of this Part.

46.18 Duty to Comply

- A. Issuance of a permit pursuant to the provisions of this regulation does not relieve the owner/operator from the responsibility to comply fully with any applicable state or federal air pollution control rules or regulations and any other requirements under local, state or federal law.
- B. Any conditions included with a permit issued pursuant to this regulation shall have the full force and effect of rules and regulations.
- C. Any person who receives a permit shall comply with all conditions included with the permit.

D.	Failure to comply with any condition included in a permit issued pursuant to this regulation shall be considered failure to comply with this regulation.