DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL Division of Air Quality

1147 CO₂ Budget Trading Program

12/11/18

1.0 CO₂ Budget Trading Program General Provisions

1.1 Purpose

This Regulation establishes the State of Delaware component of the CO_2 Budget Trading Program, which is designed to stabilize and then reduce anthropogenic emissions of CO_2 , a greenhouse gas, from CO_2 budget sources in an economically efficient manner.

1.2 Applicability.

- 1.2.1 *Units.* 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 25 MWe shall be a CO_2 budget unit and any source that includes one or more such units shall be a CO_2 budget source, subject to the requirements.
- 1.2.2 Limited exemption for units with electrical output to the electric grid restricted by permit conditions.
 - 1.2.2.1 *Applicability.* Notwithstanding subsection 1.2.1, a unit under subsection 1.2.1 that is covered by a permit issued pursuant to 7 **DE Admin. Code** 1102 or 1130 containing a practically enforceable condition restricting the supply of the unit's annual electrical output to the electric grid to less than or equal to 10 percent of the annual gross generation of the unit, and which complies with the provisions in subsection 1.2.2.3, shall be exempt from the requirements of Regulation 1147, except for subsections 1.3, 1.4, and 1.6.
 - 1.2.2.2 *Effective date*. The exemption under subsection 1.2.2.1 shall become effective as of the January 1 that is on or after the date on which the restriction on the percentage of annual gross generation that may be supplied to the electric grid and the provisions in the permit required under subsection 1.2.2.1 become final.
 - 1.2.2.3 Compliance.
 - 1.2.2.3.1 A unit exempt under subsection 1.2.2.1 shall comply with the restriction on percentage of annual gross generation that may be supplied to the electric grid described in subsection 1.2.2.1.
 - 1.2.2.3.2 A unit exempt under subsection 1.2.2.1 shall report to the Department the amount of annual gross generation and the amount of annual gross generation supplied to the electric grid during the year by the following February 1.
 - 1.2.2.3.3 For a period of 10 years from the date the records are created, the owners and operators of a unit exempt under subsection 1.2.2.1 shall retain, at the source that includes the unit, records demonstrating that the conditions of the permit under subsection 1.2.2.1 were met. The 10-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the Department. The owners and operators bear the burden of proof that the unit met the restriction on the percentage of annual gross generation that may be supplied to the electric grid.
 - 1.2.2.3.4 The owners and operators and, to the extent applicable, the CO₂ authorized account representative of a unit exempt under subsection 1.2.2.1 shall comply with all the requirements concerning all time periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.
 - 1.2.2.3.5 On the earlier of the following dates, a unit exempt under subsection 1.2.2.1 shall lose its exemption:
 - 1.2.2.3.5.1 the date on which the restriction on the percentage of annual gross generation that may be supplied to the electric grid described in subsection 1.2.2.1 is removed from the unit's permit or otherwise becomes no longer applicable in any year that commences on or after January 1, 2009; or
 - 1.2.2.3.5.2 the first date on which the unit fails to comply, or on which the owners and operators fail to meet their burden of proving that the unit is complying, with the restriction on the percentage of

annual gross generation that may be supplied to the electric grid described in subsection 1.2.2.1 during any year that commences on or after January 1, 2009.

- 1.2.2.3.6 A unit that loses its exemption in accordance with subsection 1.2.2.3.5 shall be subject to the requirements of Regulation 1147. For the purpose of applying permitting requirements under Section 3.0, and applying monitoring requirements under Section 8.0, the unit shall be treated as commencing operation on the date the unit loses its exemption.
- 1.2.3 Requirements for any CO2 Budget Source that is a petroleum refinery.
 - 1.2.3.1 Applicability. Notwithstanding subsection 1.2.1, a CO2 budget source under subsection 1.2.1 that is a petroleum refinery may elect to participate in the CO2 budget trading program by securing a permit issued pursuant to 7 **DE Admin. Code** 1102 or 1130 that contains practically enforceable conditions that require compliance with all of the provisions, except "CO2 budget emissions limitation" shall mean for a CO2 budget source, the tonnage equivalent, in CO2 emissions associated with the gross electrical generation output to the electric grid in a control period from all CO2 Budget Units at the CO2 Budget Source, of the CO2 allowances available for compliance deduction for the source for a control period; and the amount of CO₂ allowances required to be held pursuant to subsection 1.5.3.1, and deducted pursuant to subsection 6.5.2.1 shall include only the number of tons of total CO₂ emissions associated with gross generation output to the electric grid.
 - 1.2.3.2 Effective date. The requirements of subsection 1.2.3.1 shall become effective as of January 1 of the year that the permit required under subsection 1.2.3.1 becomes final.
 - 1.2.3.3 Compliance. For the purpose of applying permitting requirements under Section 3.0, and applying monitoring requirements under Section 8.0, the unit shall be treated as commencing operation on the date the permit required under subsection 1.2.3.1 becomes final.

1.3 Definitions.

The following terms, when used in this regulation, shall have the following meanings unless the context clearly indicates otherwise. Terms used but not defined herein shall have the meanings given them in 7 **DE Admin. Code** 1101 or the Clean Air Act as amended in 1990, in that order of:

"Account number" means the identification number given by the Department or its agent to each CO₂ Allowance Tracking System account.

"Acid rain emissions limitation" means as defined in 40 CFR 72.2, a limitation on emissions of sulfur dioxide or nitrogen oxides under the Acid Rain Program under title IV of the Clean Air Act.

"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 CAA and 40 CFR 72 through 78.

"Administrator" means the Administrator or the United States Environmental Protection Agency or the Administrator's authorized representative.

"Allocate or allocation" means the determination by the Department of the number of CO_2 allowances to be recorded in the compliance account of a CO_2 budget unit, an allocation set-aside account, the consumer benefit or strategic energy purpose account, or the general account of the sponsor of an approved CO_2 emissions offset project.

"Allocation year" means a calendar year for which the Department allocates or awards CO_2 allowances pursuant to Sections 5.0 and 10.0. The allocation year of each CO_2 allowance is reflected in the unique identification number given to the allowance pursuant to subsection 6.4.5.

"Allowance auction or auction" means an auction in which the Department offers CO₂ allowances for sale.

"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.

"Anaerobic digestion" means the degradation of organic material including manure brought about through the action of microorganisms in the absence of elemental oxygen.

"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.

"Ascending Price, Multiple Round Auction" means a multiple round auction starting with an opening price with increases each round by predetermined increments. In each round, bidders offer the quantity they are

willing to purchase at the posted price. Rounds continue so long as demand exceeds the quantity offered for sale. At the completion of the final round, allowances may be allocated, subject to subsection 11.5:

- (1) At the final price to remaining bidders and withhold unsold allowances for a future auction, or
- (2) At the penultimate price, first to final round bidders and then to bidders in the penultimate round in chronological order of bid during the penultimate round for all remaining allowances, or
- (3) According to an alternative mechanism designed to effectuate the objectives of this section.

"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.

"Attribute credit" means an attribute credit represents the attributes related to one megawatt-hour of electricity generation.

"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 Section 8.0, 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 Section 8.0.

"Award" means the determination by the Department of the number of CO_2 offset allowances to be recorded in the general account of a project sponsor pursuant to subsection 10.7. Award is a type of allocation.

"Billing meter" means to qualify as a billing meter, the measurement device must be used to measure electric or thermal output for commercial billing under a contract. The facility selling the electric or thermal output must have different owners from the owners of the party purchasing the electric or thermal output.

"Biogas" means a gas resulting from the decomposition of organic matter under anaerobic conditions. The principle constituents are methane and carbon dioxide.

"Cost Containment Reserve trigger price, or CCR trigger price" means the CCR trigger price is also the minimum price at which CO_2 CCR allowances are offered for sale by the Department at auction. The CCR trigger price shall be \$4.00 per CO_2 Allowance for calendar year 2014, \$6.00 per CO_2 Allowance in calendar year 2015, \$8.00 per CO_2 allowance in calendar year 2016, and \$10.00 per CO_2 Allowances in calendar year 2017, each calendar year thereafter, 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.

"CO₂ authorized alternate account representative" means for a CO_2 budget source and each CO_2 budget unit at the source, the alternate natural person who is authorized by the owners and operators of the source and all CO_2 budget units at the source, in accordance with Section 2.0, to represent and legally bind each owner and operator in matters pertaining to the CO_2 Budget Trading Program or, for a general account, the alternate natural person who is authorized, under Section 6.0, to transfer or otherwise dispose of CO_2 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 alternate natural person shall be the same person as the alternate designated representative under the Acid Rain Program.

"**CO₂ allowance**" means a limited authorization by the Department or a participating state under the CO_2 Budget Trading Program to emit up to one ton of CO_2 , subject to all applicable limitations contained in this regulation.

"CO₂ Allowance Auction Website" means the website containing information regarding the auctions to be conducted pursuant to this Regulation. The website shall be available through a link from the Department's main website at http://www.dnrec.delaware.gov/.

" CO_2 allowance deduction or deduct CO_2 allowances" means the permanent withdrawal of CO_2 allowances by the Department or its agent from a CO_2 Allowance Tracking System compliance account to account for the number of tons of CO_2 emitted from a CO_2 budget source for a control period, determined in accordance with Section 8.0, or for the forfeit or retirement of CO_2 allowances as provided by this regulation.

"CO₂ allowance price" means the price for CO₂ allowances in the CO₂ Budget Trading Program for a particular time period as determined by the Department or its agent, calculated based on a volume-weighted

average of transaction prices reported to the Department or its agent, and taking into account prices as reported publicly through reputable sources.

" CO_2 allowances held or hold CO_2 allowances" means the CO_2 allowances recorded by the Department or its agent, or submitted to the Department or its agent for recordation, in accordance with Sections 6.0 and 7.0, in a CO_2 Allowance Tracking System account.

"CO₂ Allowance Tracking System (COATS)" means the system by which the Department or its agent records allocations, deductions, and transfers of CO_2 allowances under the CO_2 Budget Trading Program. The tracking system may also be used to track CO_2 emissions offset projects, CO_2 allowance prices and emissions from affected sources.

" CO_2 Allowance Tracking System account" means an account in the CO_2 Allowance Tracking System established by the Department or its agent for purposes of recording the allocation, holding, transferring, or deducting of CO_2 allowances.

" CO_2 allowance transfer deadline" means midnight of the March 1 occurring after the end of the relevant control period and each relevant interim control period, if that March 1 is not a business day, midnight of the first business day thereafter and is the deadline by which CO_2 allowances must be submitted for recordation in a CO_2 budget source's compliance account in order for the source to meet the CO2 requirements of subsection 1.5.3 for the control period and each relevant interim control period immediately preceding such deadline.

" CO_2 authorized account representative" means for a CO_2 budget source and each CO_2 budget unit at the source, the natural person who is authorized by the owners and operators of the source and all CO_2 budget units at the source, in accordance with Section 2.0, to represent and legally bind each owner and operator in matters pertaining to the CO_2 Budget Trading Program or, for a general account, the natural person who is authorized, under Section 6.0, to transfer or otherwise dispose of CO_2 allowances held in the general account.

If the CO_2 budget source is also subject to the Acid Rain Program, then for a CO_2 Budget Trading Program compliance account, this natural person shall be the same person as the authorized account representative under the Acid Rain Program.

" CO_2 budget emissions limitation" means for a CO_2 budget source, the tonnage equivalent, in CO_2 emissions in a control period or an interim control period, of the CO_2 allowances available for compliance deduction for the source for a control period or an interim control period.

"CO₂ budget permit" means the portion of the legally binding permit issued by the Department pursuant to **Regulation 1102, 1130 and 1147** to a CO₂ budget source or CO₂ budget unit which 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.

"CO₂ budget source" means a source that includes one or more CO₂ budget units.

"CO₂ Budget Trading Program" means a multi-state CO_2 air pollution control and emissions reduction program established pursuant to this regulation and corresponding regulations in other states as a means of reducing emissions of CO_2 from CO_2 budget sources.

"CO₂ budget unit" means a unit that is subject to the CO₂ Budget Trading Program requirements under subsection 1.2.

" CO_2 cost containment reserve allowance or CO_2 CCR allowance" means a CO_2 allowance that is offered for sale at an auction by the Department for the purpose of containing the cost of CO_2 Allowances. CO_2 CCR allowances offered for sale at an auction are separate from and additional to CO_2 allowances allocated from Delaware's CO_2 Budget Trading Program base and adjusted budgets. CO_2 CCR allowances are subject to all applicable limitations contained in this section.

"CO₂ cost containment reserve trigger price, or CCR trigger price" means the CCR trigger price is 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 Table 1 below.

Table 1	. CO ₂ CO	CR Trigg	jer Price	•								
2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
\$10.25	\$10.51	\$10.77	\$13.00	\$13.91	\$14.88	\$15.92	\$17.03	\$18.22	\$19.50	\$20.87	\$22.33	\$23.89

"CO₂ emissions containment reserve allowance or CO2 ECR allowance" means a CO2 allowance that is withheld from sale at an auction by the Department for the purpose of additional emission reduction in the event of lower than anticipated emission reduction costs.

"CO₂ emissions containment reserve trigger price, or ECR trigger price" means the ECR trigger price is 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 Table 2.

Table 2. CO2 ECR Trigger Price									
2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
\$6.00	\$6.42	\$6.87	\$7.35	\$7.86	\$8.41	\$9.00	\$9.63	\$10.30	\$11.02

"CO₂ equivalent" means the quantity of a given greenhouse gas multiplied by its global warming potential (GWP).

" CO_2 offset allowance" means a CO_2 allowance that is awarded to the sponsor of a CO_2 emissions offset project pursuant to subsection 10.7 and is subject to the relevant compliance deduction limitations of subsection 6.5.1.3

"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.

"**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.

"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 CO_2 budget unit under subsection 1.2 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 CO_2 budget unit under subsection 1.2 on the date the unit commences commercial operation, the date the unit seconds a CO_2 budget unit under subsection 1.2 on the date the unit becomes a CO_2 budget unit under subsection 1.2 shall be the unit's date of commencement of commercial operation.

"Commence operation" means to begin 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 CO_2 budget unit under subsection 1.2 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 CO_2 budget unit under subsection 1.2 on the date of commencement of operation, the date the unit becomes a CO_2 budget unit under subsection 1.2 on the date of commencement of operation, the date the unit becomes a CO_2 budget unit under subsection 1.2 shall be the unit's date of commencement of operation.

"**Compliance account**" means a CO_2 Allowance Tracking System account, established by the Department or its agent for a CO_2 budget source under Section 6.0 of this regulation, in which the CO_2 allowance allocations for the source are initially recorded and in which are held CO_2 allowances available for use by the source for a

control period and each interim control period for the purpose of meeting the CO2 requirements of subsection 1.5.3.

"Conflict of interest" means a situation that may arise with respect to an individual in relation to any specific project sponsor, CO_2 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.

"Continuous emissions monitoring system or CEMS" means the equipment required under Section 8.0 to sample, analyze, measure, and provide, by means of readings recorded at least once every 15 minutes (using an automated DAHS), 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 40 CFR 75 and Section 8.0. The following systems are types of continuous emissions monitoring systems required under Section 8.0.

- (1) A flow monitoring system, consisting of a stack flow rate monitor and an automated data acquisition and handling system and providing a permanent, continuous record of stack gas volumetric flow rate, in standard cubic feet per hour (scfh);
- (2) A nitrogen oxides emissions rate (or NO_X-diluent) monitoring system, consisting of a NO_X pollutant concentration monitor, a diluent gas (CO₂ or O₂) monitor, and an automated data acquisition and handling system and providing a permanent, continuous record of NO_X concentration, in parts per million (ppm), diluent gas concentration, in percent CO₂ or O₂; and NO_X emissions rate, in pounds per million British thermal units (lb/MMBtu);
- (3) A moisture monitoring system, as defined in 40 CFR 75.11(b)(2) and providing a permanent, continuous record of the stack gas moisture content, in percent H_2O ;
- (4) A carbon dioxide monitoring system, consisting of a CO₂ pollutant concentration monitor (or an oxygen monitor plus suitable mathematical equations from which the CO₂ concentration is derived) and an automated data acquisition and handling system and providing a permanent, continuous record of CO₂ emissions, in percent CO₂; and
- (5) An oxygen monitoring system, consisting of an O₂ concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of O₂, in percent O₂.

"**Control period**" means a three-calendar-year time period. The first control period is from January 1, 2009 to December 31, 2011, inclusive. Each subsequent sequential three-calendar-year period is a separate control period. The first two calendar years of each control period are defined as an interim control period beginning in January 1, 2015.

"Cross State Air Pollution Rule (CSAPR) NOX Annual Trading Program" means a multi-state NO_X air pollution control and emission reduction program established in accordance with subpart AAAAA of 40 CFR Part 97 and 40 CFR 52.38(a) (including such a program that is revised in a SIP revision approved by the Administrator under 40 CFR 52.38(a)(3) or (4) or that is established in a SIP revision approved by the Administrator under 40 CFR 52.38(a)(5)), as a means of mitigating interstate transport of fine particulates and NO_X .

"Cross State Air Pollution Rule (CSAPR) NOX Ozone Season Trading Program" means a multi-state NO_X air pollution control and emission reduction program established in accordance with subpart BBBBB of 40 CFR Part 97 and 40 CFR 52.38(b) (including such a program that is revised in a SIP revision approved by the Administrator under 40 CFR 52.38(b)(3) or (4) or that is established in a SIP revision approved by the Administrator under 40 CFR 52.38(b)(5)), as a means of mitigating interstate transport of ozone and NO_X .

"Cross State Air Pollution Rule (CSAPR) SO2 Group 1 Trading Program" means a multi-state SO₂ air pollution control and emission reduction program established in accordance with subpart CCCCC of 40 CFR Part 97 and 40 CFR 52.39(a), (b), (d) through (f), (j), and (k) (including such a program that is revised in a SIP revision approved by the Administrator under 40 CFR 52.39(d) or (e) or that is established in a SIP revision approved by the Administrator under 40 CFR 52.39(f)), as a means of mitigating interstate transport of fine particulates and SO₂.

"Cross State Air Pollution Rule (CSAPR) SO2 Group 2 Trading Program" means a multi-state SO2 air pollution control and emission reduction program established in accordance with subpart DDDDD of 40 CFR Part 97 and 40 CFR 52.39(a), (c), and (g) through (k) of this chapter (including such a program that is revised in a SIP revision approved by the Administrator under 40 CFR 52.39(g) or (h) of this chapter or that is established in a SIP revision approved by the Administrator under 40 CFR 52.39(i) 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 CO_2 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 violations.

"Delaware Auction Account" means an account administered by the Department of Natural Resources and Environmental Control or its agent for purposes of auctioning CO₂ allowances.

"Delaware CO₂ Budget Trading Program adjusted budget" means The Delaware CO₂ Budget Trading Program adjusted budget is determined in accordance with subsection 5.3 and is the annual amount of CO₂ tons available in Delaware 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 Delaware CO₂ Budget Trading Program adjusted budget.

"**Delaware CO₂ Budget Trading Program Base Budget**" means the Delaware CO₂ Budget Trading Program base budget is specified in subsection 5.1. 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 Delaware CO₂ Budget Trading Program Base Budget.

"Department" means the State of Delaware Department of Natural Resources and Environmental Control.

"Eligible biomass" means eligible biomass includes 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, biogas, and other neat liquid biofuels derived from such fuel sources. Sustainably harvested will be determined by the Department.

"Excess emissions" means any tonnage of CO_2 emitted by a CO_2 budget source during a control period that exceeds the CO_2 budget emissions limitation for the source.

"Excess interim emission" means any tonnage of CO_2 emitted by a CO_2 budget source during an interim control period multiplied by 0.50 that exceeds the CO_2 budget emissions limitation for the source.

"First control period interim adjustment for banked allowances" means an adjustment applied to the State of Delaware CO_2 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 CO_2 Budget Trading Program, but not including accounts opened by participating states.

"Forest offset project" mean an offset project involving reforestation, improved forest management, or avoided conversion.

"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.

"Forest offset protocol" means the protocol titled "Regional Greenhouse Gas Initiative Offset Protocol U.S. Forest Projects", published by the participating states on 02/08/13.

"Fossil fuel" means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.

"Fossil fuel-fired" means:

(1) With regard to a unit that commenced or commences 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 of the annual heat input on a Btu basis during any year.

(2) With regard to a unit that commences 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 of the annual heat input on a Btu basis during any year.

"General account" means a CO₂ Allowance Tracking System account, established under Section 6.0, that is not a compliance account.

"Global warming potential (GWP)" means a measure of the radiative efficiency (heat-absorbing ability) of a particular gas relative to that of carbon dioxide (CO_2) 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 CO_2 . Global warming potentials used in this Regulation are consistent with the values used in the Intergovernmental Panel on Climate Change, Fifth Assessment Report.

"Gross generation" means the electrical output (in MWe) at the terminals of the generator.

"Independent verifier" means an individual that has been approved by the Department or its agent to conduct verification activities.

"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.

"Interim control period" means an interim control period is a one-calendar-year time period, during each of the first and second calendar years of each three 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 year control period will have two interim control periods, comprised of each of the first two calendar years of that control period.

"Life-of-the-unit contractual arrangement" means a unit participation power sales agreement under which a customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and/or associated energy from any specified unit pursuant to a contract:

- (1) For the life of the unit;
- (2) For a cumulative term of no less than 30 years, including contracts that permit an election for early termination; or
- (3) For a period equal to or greater than 25 years or 70 percent of 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.

"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. The Department may determine an appropriate market definition and market penetration metric for a category of technology, product or practice, and may issue guidance specifying the technologies, products or practices that meet a specified market penetration rate.

"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 appendix D of 40 CFR 75 to report heat input, this value should be calculated, in accordance with 40 CFR 75, 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 CFR 75, using the maximum potential flow rate and either the maximum carbon dioxide concentration (in percent CO_2) or the minimum oxygen concentration (in percent O_2).

"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.

"Monitoring system" means any monitoring system that meets the requirements of Section 8.0, including continuous emissions monitoring system, an accepted monitoring system, or an alternative monitoring system. "Nameplate capacity" means the maximum electrical output (in MWe) that a generator can sustain over a specified period of time when not restricted by seasonal or other de-ratings as measured in accordance with the United States Department of Energy standards.

"**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).

"Non-CO₂ budget unit" means a unit that does not meet the applicability criteria of subsection 1.2.

"Offset project" means an offset project includes 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 subsection 10.4. Equipment, materials, items, or actions unrelated to an offset project reduction of CO_2 equivalent emissions or the sequestration of carbon, but occurring at a location where an offset project occurs, shall not be considered part of an offset project, unless specified at subsection 10.5.

"**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.

"Owner" means any of the following persons:

- (1) Any holder of any portion of the legal or equitable title in a CO₂ budget unit; or
- (2) 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
- (3) Any purchaser of power from a CO_2 budget unit under a life-of-the-unit contractual arrangement in which the purchaser controls the dispatch of the unit; or
- (4) 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.

"**Participating state**" means a state that has established a corresponding regulation as part of the CO₂ Budget Trading Program.

"**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 subsection 3.2 of the forest offset protocol.

"Public Benefit Purpose" shall mean purposes including the promotion of energy efficiency, the mitigation of electricity ratepayer impacts attributable to RGGI, the promotion of distributed renewable or non-carbonemitting energy technologies, the stimulation and reward of investment in the development of innovative carbon emissions abatement technologies with significant carbon reduction potential, and funding of the administration of the Program established by Title 7, Chapter 60.

"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.

"**Recordation, record, or recorded**" means with regard to CO_2 allowances, the movement of CO_2 allowances by the Department or its agent from one CO_2 Allowance Tracking System account to another, for purposes of allocation, transfer, or deduction.

"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 commonly referred to as a "community digester" or "centralized digester."

"**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.

"**Reporting Period**" means the period of time covered in by forest offset project data report. The first reporting period for an offset project in an initial crediting period may consist of 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 12 consecutive months.

"**Reserve Price**" means the minimum acceptable price for each CO_2 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 Section 9.0.

"**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.

"Serial number" means when referring to CO_2 allowances, the unique identification number assigned to each CO_2 allowance by the Department or its agent under subsection 6.4.5.

"Single Round Sealed-Bid Uniform Price Auction" means a single round sealed-bid uniform price auction format, under which bidders may submit multiple bids at different prices; the price paid by all awarded bidders will be uniform and equal to the highest rejected bid price.

"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. A "source," including a "source" with multiple units, shall be considered a single "facility."

"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.

"State of Delaware's CO₂ Budget Trading Program adjusted budget" means The State of Delaware's CO₂ Budget Trading Program adjusted budget is determined in accordance with subsection 5.3 and is the annual amount of CO₂ tons available in the State of Delaware 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 State of Delaware's CO₂ Budget Trading Program adjusted budget.

"State of Delaware CO₂ Budget Trading Program Base Budget" means the annual amount of CO₂ tons available in the State of Delaware for allocation in a given allocation year, in accordance with the CO₂ Budget Trading Program. CO₂ offset allowances allocated to project sponsors are separate from and additional to CO₂ allowances allocated from the State of Delaware CO₂ Budget Trading Program Base Budget.

"Submit or serve" means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation:

- (1) in person;
- (2) by United States Postal Service; or
- (3) by other means of dispatch or transmission and delivery.

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.

"System benefit fund" means any fund collected directly from retail electricity or natural gas ratepayers.

"Third adjustment for banked allowances" means an adjustment applied to the State of Delaware CO_2 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 CO_2 Budget Trading Program, but not including accounts opened by participating states, that are in addition to the aggregate quantity of emissions from all CO_2 budget sources in all of the participating states at the end of the fourth control period in 2020 and as reflected in the CO_2 Allowance Tracking System on March 15, 2021.

"Ton or tonnage" means any "short ton", or 2,000 pounds. For the purpose of determining compliance with the CO_2 requirements of subsection 1.5.3, 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 Section 8.0, 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 tons. A short ton is equal to 0.9072 metric tons.

"Total solids" means total solids are the total of all solids in a sample. They include the total suspended solids, total dissolved solids, and volatile suspended solids.

"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. Includes all related assets and equipment located within the service territory of the entity, defined as the service territory of a load-serving entity specified by the applicable state regulatory agency.

"Twelve month period" means a period of twelve consecutive months determined on a rolling basis where a new twelve month period begins on the first day of each calendar month.

"**Undistributed CO₂ allowances**" mean CO_2 allowances originally allocated to a set aside account as pursuant to subsection 5.3 that were not distributed.

"Unit" means a fossil fuel-fired stationary boiler, combustion turbine, or combined cycle system.

"Unit operating day" means a calendar day in which a unit combusts any fuel.

"**Unsold CO₂ allowances**" mean CO₂ allowances that have been made available for sale in an auction conducted under the Department or its agent, but not sold.

"Verification" means the verification by an independent verifier that certain parts of a CO_2 emissions offset project consistency application and/or measurement, monitoring or verification report conforms to the requirements.

"Volatile solids" means the fraction of total solids that is comprised primarily of organic matter.

- 1.4 Measurements, abbreviations and acronyms. Measurements, abbreviations, and acronyms used in this regulation are defined as follows:
 - 1.4.1 CO₂: carbon dioxide.
 - 1.4.2 CO₂e: carbon dioxide equivalent.
 - 1.4.3 hr: hour.

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- 1.4.4 lb: pounds.
- 1.4.5 MW: megawatt
- 1.4.6 MMBtu: one million British thermal units
- 1.4.7 MWh: megawatt hours
- 1.4.8 MWe: megawatt electrical.
- Standard requirements.
- 1.5.1 Permit requirements.
 - 1.5.1.1 The CO₂ authorized account representative of each CO₂ budget source required to have an operating permit pursuant to Regulation 1102, 1130 and 1147 of this Title and each CO₂ budget unit required to have an operating permit pursuant to Regulation 1102, 1130 and 1147 of this Title shall:
 - 1.5.1.1.1 submit to the Department a complete CO_2 budget permit application under subsection 3.3 in accordance with the deadlines specified in subsection 3.2; and
 - 1.5.1.1.2 submit in a timely manner any supplemental information that the Department determines is necessary in order to review the CO₂ budget permit application and issue or deny a CO₂ budget permit.
 - 1.5.1.2 The owners and operators of each CO_2 budget source required to have an operating permit pursuant to DE Regulations 1102, 1130 and 1147 of this Title and each CO_2 budget unit required to have an operating permit pursuant DE Regulations 1102, 1130 and 1147 of this Title for the source shall have a CO_2 budget permit and operate the CO_2 budget source and the CO_2 budget unit at the source in compliance with such CO_2 budget permit.
- 1.5.2 *Monitoring requirements.*
 - 1.5.2.1 The owners and operators and, to the extent applicable, the CO_2 authorized account representative of each CO_2 budget source and each CO_2 budget unit at the source shall comply with the monitoring requirements of Section 8.0.
 - 1.5.2.2 The emissions measurements recorded and reported in accordance with Section 8.0 shall be used to determine compliance by the unit with the CO₂ requirements under subsection 1.5.3.

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- 1.5.3 CO₂ requirements.
 - 1.5.3.1 The owners and operators of each CO_2 budget source and each CO_2 budget unit at the source shall hold CO_2 allowances available for compliance deductions under subsection 6.5, as of the CO_2 allowance transfer deadline, in the source's compliance account in an amount not less than the total CO_2 emissions for the control period from all CO_2 budget units at the source, less the CO_2 allowances deducted to meet the requirements of subsection 1.5.3.2, with respect to the previous two interim control periods, as determined in accordance with Sections 6.0 and 8.0.
 - 1.5.3.2 The owners and operators of each CO_2 budget source and each CO_2 budget unit at the source shall hold CO_2 allowances available for compliance deductions under subsection 6.5, as of the CO_2 allowance transfer deadline, in the source's compliance account in an amount not less than the total CO_2 emissions for the interim control period from all CO_2 budget units at the source multiplied by 0.50, as determined in accordance with Sections 6.0 and 8.0.
 - 1.5.3.3 Each ton of CO_2 emitted in excess of the CO_2 budget emissions limitation for a control period shall constitute a separate violation and applicable state law.
 - 1.5.3.4 Each ton of excess interim emissions shall constitute a separate violation of this section and applicable state law.
 - 1.5.3.5 A CO₂ budget unit shall be subject to the requirements under subsection 1.5.3.1 starting on the later, of January 1, 2009 or the date on which the unit commences operation.
 - 1.5.3.6 CO_2 allowances shall be held in, deducted from, or transferred among CO_2 Allowance Tracking System accounts in accordance with Sections 5.0, 6.0, and 7.0, and subsection 10.7.
 - 1.5.3.7 A CO₂ allowance shall not be deducted, in order to comply with the requirements under subsections 1.5.3.1 or 1.5.3.2, 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 subsections 1.5.3.1 or 1.5.3.2, beyond the applicable percent limitations set out in subsection 6.5.1.3.
 - 1.5.3.8 A CO_2 allowance under the CO_2 Budget Trading Program is a limited authorization by the Department or a participating state to emit one ton of CO_2 in accordance with the CO_2 Budget Trading Program. No provision of the CO_2 Budget Trading Program, the CO_2 budget permit application, or the CO_2 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.
 - 1.5.3.9 A CO_2 allowance under the CO_2 Budget Trading Program does not constitute a property right.
- 1.5.4 *Excess emissions requirements.* 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:
 - 1.5.4.1 Forfeit the CO_2 allowances required for deduction under subsection 6.5.4.1, provided CO_2 offset allowances may not be used to cover any part of such excess emissions; and
 - 1.5.4.2 Pay any fine, penalty, or assessment or comply with any other remedy imposed under subsection 6.5.4.2.
- 1.5.5 *Recordkeeping and reporting requirements.*
 - 1.5.5.1 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 10 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 10 years, in writing by the Department.
 - 1.5.5.1.1 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 subsection 2.4, 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.
 - 1.5.5.1.2 All emissions monitoring information, in accordance with Section 8.0 and 40 CFR 75.57.

- 1.5.5.1.3 Copies of all reports, compliance certifications, and other submissions and all records made or required under the CO₂ Budget Trading Program.
- 1.5.5.1.4 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.
- 1.5.5.2 The CO_2 authorized account representative of a CO_2 budget source and each CO_2 budget unit at the source shall submit the reports and compliance certifications required under the CO_2 Budget Trading Program, including those under Section 4.0.

1.5.6 *Liability*.

- 1.5.6.1 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.
- 1.5.6.2 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.
- 1.5.6.3 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.
- 1.5.7 Effect on other authorities

No provision of the CO_2 Budget Trading Program, a CO_2 budget permit application, or a CO_2 budget permit, shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the CO_2 authorized account representative of a CO_2 budget source or CO_2 budget unit from compliance with any other provisions of applicable State and federal law and regulations.

1.6 Computation of time.

- 1.6.1 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.
- 1.6.2 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.
- 1.6.3 Unless otherwise stated, if the final day of any time period, under the CO₂ Budget Trading Program, falls on a weekend or a State of Delaware or Federal holiday, the time period shall be extended to the next business day.

1.7 Severability.

If any provision, or its application to any particular person or circumstances, is held invalid, the remainder, and the application thereof to other persons or circumstances, shall not be affected thereby.

16 DE Reg. 994 (03/01/13)

17 DE Reg. 644 (12/01/13)

22 DE Reg. 511 (12/01/18)

12/11/18

2.0 CO₂ Authorized Account Representative for CO₂ Budget Sources

- 2.1 Authorization and responsibilities of the CO₂ authorized account representative.
 - 2.1.1 Except as provided under subsection 2.2, each CO_2 budget source, including all CO_2 budget units at the source, shall have one and only one CO_2 authorized account representative, with regard to all matters under the CO_2 Budget Trading Program concerning the source or any CO_2 budget unit at the source.
 - 2.1.2 The CO_2 authorized account representative of the CO_2 budget source shall be selected by an agreement binding on the owners and operators of the source and all CO_2 budget units at the source and must act in accordance with the certificate of representation under subsection 2.4.
 - 2.1.3 Upon receipt by the Department or its agent of a complete account certificate of representation under subsection 2.4, 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 CO_2 budget source represented and each CO_2 budget unit at the source in all matters pertaining to the CO_2 Budget Trading Program, notwithstanding any agreement between the CO_2 authorized account representative and such owners and operators. The owners and operators shall be bound by any decision or order issued to the CO_2 authorized account representative by the Department or a court regarding the source or unit.

- 2.1.4 No CO_2 budget permit shall be issued, and no CO_2 Allowance Tracking System account shall be established for a CO_2 budget source, until the Department or its agent has received a complete account certificate of representation under subsection 2.4 for a CO_2 authorized account representative of the source and the CO_2 budget units at the source.
- 2.1.5 Each submission under the CO_2 Budget Trading Program shall be submitted, signed, and certified by the CO_2 authorized account representative for each CO_2 budget source on behalf of which the submission is made. Each such submission shall include the following certification statement by the CO_2 authorized account representative:

"I am authorized to make this submission on behalf of the owners and operators of the CO_2 budget sources or CO_2 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."

- 2.1.6 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 subsection 2.1.5.
- 2.2 CO₂ authorized alternate account representative.
 - 2.2.1 An account certificate of representation may designate one and only one CO_2 authorized alternate account representative who may act on behalf of the CO_2 authorized account representative. The agreement by which the CO_2 authorized alternate account representative is selected shall include a procedure for authorizing the CO_2 authorized alternate account representative to act in lieu of the CO_2 authorized account representative.
 - 2.2.2 Upon receipt by the Department or its agent of a complete account certificate of representation under subsection 2.4, any representation, action, inaction, or submission by the CO₂ authorized alternate account representative shall be deemed to be a representation, action, inaction, or submission by the CO₂ authorized alternate authorized account representative.
 - 2.2.3 Except in subsections 2.1.1, 2.3, 2.4, and 6.2, whenever the term " CO_2 authorized account representative" is used in this regulation, the term shall be construed to include the CO_2 authorized alternate account representative.
- 2.3 Changing the CO_2 authorized account representative and the CO_2 authorized alternate account representative; changes in the owners and operators.
 - 2.3.1 Changing the CO_2 authorized account representative. The CO_2 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 subsection 2.4. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous CO_2 authorized account representative or 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.
 - 2.3.2 Changing the CO₂ authorized alternate account representative. The 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 subsection 2.4. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous or CO_2 authorized alternate account representative or alternate CO_2 authorized 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 alternate account representative and the owners and operators of the CO_2 budget source and the CO_2 budget units at the source.

- 2.3.3 Changes in the owners and operators.
 - 2.3.3.1 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 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.
 - 2.3.3.2 Within 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 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.
- 2.4 Account certificate of representation.
 - 2.4.1 A complete account certificate of representation for a CO₂ authorized account representative or a CO₂ authorized alternate account representative shall include the following elements in a format prescribed by the Department or its agent:
 - 2.4.1.1 Identification of the CO₂ budget source and each CO₂ budget unit at the source for which the account certificate of representation is submitted;
 - 2.4.1.2 the name, address, e-mail address, telephone number, and facsimile transmission number of the CO₂ authorized account representative and any CO₂ authorized alternate account representative;
 - 2.4.1.3 A list of the owners and operators of the CO₂ budget source and of each CO₂ budget unit at the source;
 - 2.4.1.4 The following certification statement by the CO₂ authorized account representative and any CO₂ authorized alternate account representative:

"I certify that I was selected as the CO_2 authorized account representative or CO_2 authorized alternate account representative, as applicable, by an agreement binding on the owners and operators of the CO_2 budget source and each CO_2 budget unit at the source. I certify that I have all the necessary authority to carry out my duties and responsibilities under the CO_2 Budget Trading Program on behalf of the owners and operators of the CO_2 budget source and of each CO_2 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."; and

- 2.4.1.5 The signature of the CO_2 authorized account representative and any CO_2 authorized alternate account representative and the dates signed.
- 2.4.2 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.
- 2.5 Objections concerning the CO₂ authorized account representative.
 - 2.5.1 Once a complete account certificate of representation under subsection 2.4 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 subsection 2.4.

- 2.5.2 Except as provided in subsections 2.3.1 or 2.3.2, 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.
- 2.5.3 Neither the Department nor its agent will adjudicate any private legal dispute 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.
- 2.6 Delegation by CO₂ authorized account representative and CO₂ authorized alternate account representative
 - 2.6.1 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.
 - 2.6.2 A CO₂ authorized alternate 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.
 - 2.6.3 In order to delegate authority to make an electronic submission to the Department or its agent in accordance with subsections 2.6.1 and 2.6.2, 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:
 - 2.6.3.1 The name, address, e-mail address, telephone number, and facsimile transmission number of such CO₂ authorized account representative or CO₂ authorized alternate account representative;
 - 2.6.3.2 The name, address, e-mail address, telephone number and facsimile transmission number of each such natural person, herein referred to as the "electronic submission agent";
 - 2.6.3.3 For each such natural person, a list of the type of electronic submissions under subsections 2.6.1 or 2.6.2 for which authority is delegated to him or her; and
 - 2.6.3.4 The following certification statements by such CO₂ authorized account representative or CO₂ authorized alternate account representative:
 - 2.6.3.4.1 "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 CO₂ authorized alternate account representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under CO₂ Budget Trading Program shall be deemed to be an electronic submission by me."
 - 2.6.3.4.2 "Until this notice of delegation is superseded by another notice of delegation under the 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 the CO₂ Budget Trading Program is terminated."
 - 2.6.4 A notice of delegation submitted under subsection 2.6.3 shall be effective, with regard to the CO_2 authorized account representative or CO_2 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 CO_2 authorized account representative or CO_2 authorized alternate account representative or CO_2 authorized alternate account representative or CO_2 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.
 - 2.6.5 Any electronic submission covered by the certification in subsection 2.6.3.4.1 and made in accordance with a notice of delegation effective under subsection 2.6.4 shall be deemed to be an electronic submission by the CO_2 authorized account representative or CO_2 authorized alternate account representative submitting such notice of delegation.
 - 2.6.6 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 this section.
 - 2.6.7 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 this section.

- 2.6.8 In order to delegate authority to review information in the CO_2 allowance tracking system in accordance with subsections 2.6.6 and 2.6.7 of this section, the CO_2 authorized account representative or CO_2 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:
 - 2.6.8.1 The name, address, e-mail address, telephone number, and facsimile transmission number of such CO2 authorized account representative or CO₂ authorized alternate account representative;
 - 2.6.8.2 The name, address, e-mail address, telephone number and facsimile transmission number of each such natural person, herein referred to as the "reviewer";
 - 2.6.8.3 For each such natural person, a list of the type of information under subsections 2.6.6 or 2.6.7 for which authority is delegated to him or her; and
 - 2.6.8.4 The following certification statements by such CO₂ authorized account representative or CO₂ authorized alternate account representative:
 - 2.6.8.4.1 "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 subsection 2.6.9 shall be deemed to be a reviewer by me."
 - 2.6.8.4.2 "Until this notice of delegation is superseded by another notice of delegation under subsection 2.6.9, 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 subsection 2.6 is terminated."
- 2.6.9 A notice of delegation submitted under subsection 2.6.8 shall be effective, with regard to the CO_2 authorized account representative or CO_2 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 CO_2 authorized account representative or CO_2 authorized alternate account representative or CO_2 authorized account representative or CO_2 authorized account representative or CO_2 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.

22 DE Reg. 511 (12/01/18)

12/11/18

3.0 Permits

- 3.1 CO₂ budget permit requirements.
 - 3.1.1 Each CO₂ budget source must have a permit issued by the Department pursuant to Regulations 1102, 1130 and 1147.
 - 3.1.2 Each CO₂ budget permit shall contain all applicable CO₂ Budget Trading Program requirements and shall be a complete and distinguishable portion of the permit under subsection 3.1.1.
- 3.2 Submission of CO₂ budget permit applications.

For any CO_2 budget source, the CO_2 authorized account representative shall submit a complete CO_2 budget permit application under subsection 3.3 covering such CO_2 budget source to the Department by the later of January 1, 2009 or 12 months before the date on which the CO_2 budget source, or a new unit at the source, commences operation.

- 3.3 Information requirements for CO₂ budget permit applications.
 - 3.3.1 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:
 - 3.3.1.1 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;
 - 3.3.1.2 identification of each CO₂ budget unit at the CO₂ budget source; and

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3.3.1.3 the standard requirements under subsection 1.5.22 DE Reg. 511 (12/01/18)

12/11/18 4.0 Compliance Certification

- 4.1 Compliance certification report.
 - 4.1.1 *Applicability and deadline*. For each control period in which a CO₂ budget source is subject to the CO₂ requirements of subsection 1.5.3, the CO₂ authorized account representative of the source shall submit to the Department 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.
 - 4.1.2 *Contents of report.* The CO₂ authorized account representative shall include in the compliance certification report under subsection 4.1.1 the following elements, in a format prescribed by the Department:
 - 4.1.2.1 Identification of the source and each CO₂ budget unit at the source;
 - 4.1.2.2 at the CO_2 authorized account representative's option, the serial numbers of the CO_2 allowances that are to be deducted from the source's compliance account under subsection 6.5 for the control period, including the serial numbers of any CO_2 offset allowances that are to be deducted subject to the limitations of subsection 6.5.1.3; and
 - 4.1.2.3 the compliance certification under subsection 4.1.3.
 - 4.1.3 Compliance certification. In the compliance certification report under subsection 4.1, the CO_2 authorized account representative shall certify, based on reasonable inquiry of those persons with primary responsibility for operating the source and the CO_2 budget units at the source in compliance with the CO_2 Budget Trading Program, whether the source and each CO_2 budget unit at the source for which the compliance certification is submitted was operated during the calendar years covered by the report in compliance with the requirements of the CO_2 Budget Trading Program, including:
 - 4.1.3.1 Whether the source was operated in compliance with the CO₂ requirements of subsection 1.5.3;
 - 4.1.3.2 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 CO_2 emissions to the unit, in accordance with Section 8.0;
 - 4.1.3.3 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 Section 8.0. 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;
 - 4.1.3.4 whether the facts that form the basis for certification under Section 8.0 of each monitor at each unit at the source, or for using an excepted monitoring method or alternative monitoring method approved under Section 8.0, if any, have changed; and
 - 4.1.3.5 if a change is required to be reported under subsection 4.1.3.4, 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.
- 4.2 Department's action on compliance certifications.
 - 4.2.1 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.
 - 4.2.2 The Department or its agent may deduct CO_2 allowances from or transfer CO_2 allowances to a source's compliance account based on the information in the compliance certifications or other submissions, as adjusted under subsection 4.2.1.
 - 17 DE Reg. 644 (12/01/13)

22 DE Reg. 511 (12/01/18)

12/11/18

5.0 CO₂ Allowance Allocations

- 5.1 State of Delaware CO₂ Trading Program base budget.
 - 5.1.1 For the 2018 allocation year, the State of Delaware CO₂ Trading Program annual base budget is 3,763,577 tons.
 - 5.1.2 For 2019, the State of Delaware CO₂ Budget Trading Program base budget is 3,613,361 tons.
 - 5.1.3 For 2020 the State of Delaware CO₂ Budget Trading Program base budget is 3,523,027 tons.
 - 5.1.4 For 2021, the State of Delaware CO2 Budget Trading Program base budget is 3,383,313 tons.
 - 5.1.5 For 2022, the State of Delaware CO2 Budget Trading Program base budget is 3,280,789 tons.
 - 5.1.6 For 2023, the State of Delaware CO2 Budget Trading Program base budget is 3,178,264 tons.
 - 5.1.7 For 2024, the State of Delaware CO2 Budget Trading Program base budget is 3,075,739 tons.
 - 5.1.8 For 2025, the State of Delaware CO2 Budget Trading Program base budget is 2,973,215 tons.
 - 5.1.9 For 2026, the State of Delaware CO2 Budget Trading Program base budget is 2,870,690 tons.
 - 5.1.10 For 2027, the State of Delaware CO2 Budget Trading Program base budget is 2,768,165 tons.
 - 5.1.11 For 2028, the State of Delaware CO2 Budget Trading Program base budget is 2,665,641 tons.
 - 5.1.12 For 2029, the State of Delaware CO2 Budget Trading Program base budget is 2,563,116 tons.
 - 5.1.13 For 2030 and each succeeding calendar year, the State of Delaware CO2 Budget Trading Program base budget is 2,460,591 tons.
- 5.2 Undistributed and Unsold CO₂ Allowances
 - 5.2.1 The Department may retire undistributed CO₂ allowances at the end of each control period.
 - 5.2.2 The Department may retire unsold CO₂ allowances at the end of each control period.
- 5.3 CO₂ allowance allocations.
 - 5.3.1 *General allocations*. Beginning with 2014 CO₂ allowances, the Department or its agent shall auction 100% of allowances available to Delaware.
 - 5.3.2 *Delaware Auction Allowances.* The Department shall direct allowances in accordance with Title 7, Chapter 60 to the Delaware Auction Account. Except for as provided by subsection 5.3.4, the Department shall make available for auction 100 percent of the allowances annually as described by subsection 5.3.1 for public benefit purposes and as described by Title 7, Chapter 60.
 - 5.3.3 CO₂ Allowances available for allocation. For allocation years 2014 through 2030, the State of Delaware 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.
 - 5.3.4 Cost Containment Reserve (CCR) allocation. The Department shall allocate CO₂ CCR allowances, separate from and additional to the State of Delaware CO₂ Budget Trading Program base budget set forth in subsection 5.1, to the State of Delaware 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:
 - 5.3.4.1 The Department shall initially allocate 228,829 CO₂ CCR allowances for calendar year 2014.
 - 5.3.4.2 On or before January 1 of 2015 through 2020, the Department shall allocate CO_2 CCR allowances in an amount equal to 457,658, minus the number of CO_2 CCR allowances that remain in the State of Delaware Auction Account at the end of the prior calendar year.
 - 5.3.4.3 On or before January 1, 2021 and each year thereafter, the Department shall allocate current vintage year CCR allowances equal to the quantity in Table 3, and withdraw the number of CO₂ CCR allowances that remain in the State of Delaware Auction Account at the end of the prior calendar year:

Table 3. CCR allowances from 2021 forward

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2021	2022	2023	2024	2025	2026	2027	2028	2029	2030 and each year thereafter
338,331	328,078	317,826	307,573	297,321	287,069	276,816	266,564	256,311	246,059

5.3.5 Emissions Containment Reserve (ECR) Withholding. The Department shall convert and transfer any CO₂ allowances that have been withheld from any auction(s) into the State of Delaware ECR Account. The ECR withholding is for the purpose of additional emissions reductions in the event of lower than anticipated emissions reduction costs. The Department shall withhold CO₂ ECR allowances in the following manner.

5.3.5.1 If the condition in subsection 9.2.4.1 is met at an auction, then the maximum number of CO_2 ECR allowances that will be withheld from that auction will be equal to the quantity shown in Table 4 minus the total quantity of CO_2 ECR allowances that have been withheld from any prior auction(s) in that calendar year. Any CO_2 ECR allowances withheld from an auction will be transferred into the State of Delaware ECR Account.

Table 4. ECR Allowances from 2021 forward.

Tuble H Le									
2021	2022	2023	2024	2025	2026	2027	2028		2030 and each year thereafter
338,331	328,078	317,826	307,573	297,321	287,069	276,816	266,564	256,311	246,059

- 5.3.5.2 Allowances that have been transferred into State of Delaware ECR Account shall not be withdrawn.
- 5.3.6 *First control period adjustment for banked allowances*. By January 15, 2014, the Department shall establish the first control period interim adjustment for banked allowances quantity for allocation years 2014 through 2020.

Table 5. First control period adjustment for banked allowances.						
2014	2015	2016	2017	2018	2019	2020
375,603	375,603	375,603	375,603	375,603	375,603	375,603

5.3.7 Second control period adjustment for banked allowances. On March 17, 2014, the Department shall establish the second control period adjustment for banked allowances quantity the allocation years 2015 through 2020.

Table 6. Second control period adjustment for banked allowances.							
2015	2016	2017	2018	2019	2020		
626,202	626,202	626,202	626,202	626,202	626,202		

5.3.8 Third adjustment for banked allowances. 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:

 $TABA = ((TA - TAE)/5) \times RS\%$

Where:

TABA is the third adjustment for banked allowances quantity in tons.

TA, third adjustment, is the total quantity of allowances of vintage years prior to 2021 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 on March 15, 2021.

TAE, third adjustment emissions, is the 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% is State of Delaware CO_2 Base Budget divided by the Regional Budget.

5.3.9 CO₂ Budget Trading Program adjusted budgets for 2018 through 2020. On April 15, 2014 the Department shall establish the State of Delaware CO₂ Budget Trading Program adjusted budgets for the 2018 through 2020 allocation years in the following table:

Table 7. CO2 Budget Trading Adjusted budgets:					
2018	2019	2020			
2,761,771	2,611,556	2,521,222			

5.3.10 CO₂ Budget Trading Program adjusted budgets for 2021 through 2025. On April 15, 2021 the Department shall establish the State of Delaware CO₂ Budget Trading Program adjusted budgets for the 2021 through 2025 allocation years by the following formula:

AB = BB - TABA

Where:

AB is the State of Delaware CO₂ Budget Trading Program adjusted budget.

BB is the State of Delaware CO₂ Budget Trading Program base budget.

TABA is the third adjustment for banked allowances quantity in tons.

5.3.11 After making the determination in subsection 5.3.10, the Department or its Agent will publish the CO₂ trading program adjusted budgets for the 2021 through 2025 allocation years.

17 DE Reg. 644 (12/01/13)

22 DE Reg. 511 (12/01/18)

12/11/18

6.0 CO₂ Allowance Tracking System

- 6.1 CO₂ Allowance Tracking System accounts.
 - 6.1.1 *Nature and function of compliance accounts.* Consistent with subsection 6.2.1, the Department or its agent will establish one compliance account for each CO_2 budget source. Allocations of CO_2 allowances pursuant to Section 5.0 and deductions or transfers of CO_2 allowances pursuant to subsections 4.2, 6.5, 6.7, or Section 7.0 will be recorded in the compliance accounts in accordance with this regulation.
 - 6.1.2 *Nature and function of general accounts.* Consistent with subsection 6.2.2, the Department or its agent will establish, upon request, a general account for any person. Transfers of CO₂ allowances pursuant to Section 7.0 will be recorded in the general account in accordance with this regulation.
- 6.2 Establishment of accounts.
 - 6.2.1 *Compliance accounts.* Upon receipt of a complete account certificate of representation under subsection 2.4, the Department or its agent will establish a compliance account for each CO₂ budget source for which the account certificate of representation was submitted.
 - 6.2.2 General accounts.
 - 6.2.2.1 Application for general account. 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 CO₂ authorized account representative and one and only one CO₂ authorized account representative. The agreement by which the CO₂ authorized alternate account representative is selected shall include a procedure for authorizing the 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:
 - 6.2.2.1.1 name, address, e-mail address, telephone number, and facsimile transmission number of the CO_2 authorized account representative and any CO_2 authorized alternate account representative;

- 6.2.2.1.2 at the option of the CO₂ authorized account representative, organization name and type of organization;
- 6.2.2.1.3 a list of all persons subject to a binding agreement for the CO₂ authorized account representative or any CO₂ authorized alternate account representative to represent their ownership interest with respect to the CO₂ allowances held in the general account;
- 6.2.2.1.4 The following certification statement by the CO₂ authorized account representative and any CO₂ authorized alternate account representative:

"I certify that I was selected as the CO_2 authorized account representative or the CO_2 authorized alternate account representative, as applicable, by an agreement that is binding on all persons who have an ownership interest with respect to CO_2 allowances held in the general account. I certify that I have all the necessary authority to carry out my duties and responsibilities under the CO_2 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."

- 6.2.2.1.5 The signature of the CO₂ authorized account representative and any CO₂ authorized alternate account representative and the dates signed; and
- 6.2.2.1.6 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.
- 6.2.2.2 Authorization of CO₂ authorized account representative.
 - 6.2.2.2.1 Upon receipt by the Department or its agent of a complete application for a general account under subsection 6.2.2.1:
 - 6.2.2.2.1.1 The Department or its agent will establish a general account for the person or persons for whom the application is submitted.
 - 6.2.2.2.1.2 The CO₂ authorized account representative and any 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 CO₂ authorized alternate 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 CO₂ authorized alternate account representative by the Department or its agent or a court regarding the general account.
 - 6.2.2.2.1.3 Any representation, action, inaction, or submission by any CO_2 authorized alternate account representative shall be deemed to be a representation, action, inaction, or submission by the CO_2 authorized account representative.
 - 6.2.2.2.2 Each submission concerning the general account shall be submitted, signed, and certified by the CO_2 authorized account representative or any CO_2 authorized alternate account representative for the persons having an ownership interest with respect to CO_2 allowances held in the general account. Each such submission shall include the following certification statement by the CO_2 authorized account representative or any CO_2 authorized alternate account representative.

"I am authorized to make this submission on behalf of the persons having an ownership interest with respect to the CO_2 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."

- 6.2.2.2.3 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 subsection 6.2.2.2.2.
- 6.2.2.3 Changing CO₂ authorized account representative and CO₂ authorized alternate account representative; changes in persons with ownership interest.
 - 6.2.2.3.1 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 subsection 6.2.2.1. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous CO₂ authorized account representative, or the previous 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.
 - 6.2.2.3.2 The 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 subsection 6.2.2.1. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous CO₂ authorized account representative, or the previous 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 alternate account representative and the persons with an ownership interest with respect to the CO₂ allowances in the general account.
 - 6.2.2.3.3 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 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.
 - 6.2.2.3.4 Within 30 days following any change in the persons having an ownership interest with respect to CO_2 allowances in the general account, including the addition or deletion of persons, the CO_2 authorized account representative or any CO_2 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 CO_2 allowances in the general account account amending the list of persons having an ownership interest with respect to the CO_2 allowances in the general account to include the change.
- 6.2.2.4 Objections concerning CO₂ authorized account representative.
 - 6.2.2.4.1 Once a complete application for a general account under subsection 6.2.2.1 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 subsection 6.2.2.1 is received by the Department or its agent.
 - 6.2.2.4.2 Except as provided in subsections 6.2.2.3.1 and 6.2.2.3.2, no objection or other communication submitted to the Department or its agent concerning the authorization, or any representation, action, inaction, or submission of the CO_2 authorized account representative or any CO_2 authorized alternate account representative for a general account shall affect any representation, action, inaction, or submission of the CO_2 authorized account representative or any CO_2 authorized alternate account representative for a general account representative or any CO_2 authorized alternate account representative or the finality of any decision or order by the Department or its agent under the CO_2 Budget Trading Program.
 - 6.2.2.4.3 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 CO₂ authorized alternate account representative for a general account, including private legal disputes concerning the proceeds of CO₂ allowance transfers.

- 6.2.2.5 Delegation by CO₂ authorized account representative and CO₂ authorized alternate account representative.
 - 6.2.2.5.1 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 Sections 6.0 and 7.0.
 - 6.2.2.5.2 A CO₂ authorized alternate 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 Sections 6.0 and 7.0.
 - 6.2.2.5.3 In order to delegate authority to make an electronic submission to the Department or its agent in accordance with subsections 6.2.2.5.1 and 6.2.2.5.2, the CO_2 authorized account representative or CO_2 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:
 - 6.2.2.5.3.1 The name, address, e-mail address, telephone number, and facsimile transmission number of such CO₂ authorized account representative or CO₂ authorized alternate account representative;
 - 6.2.2.5.3.2 The name, address, e-mail address, telephone number and facsimile transmission number of each such natural person, herein referred to as "electronic submission agent";
 - 6.2.2.5.3.3 For each such natural person, a list of the type of electronic submissions under subsections 6.2.1 and 6.2.2 for which authority is delegated to him or her; and
 - 6.2.2.5.3.4 The following certification statements by such CO₂ authorized account representative or CO₂ authorized alternate account representative:
 - 6.2.2.5.3.4.1 *"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* CO_2 *authorized account representative or* CO_2 *authorized alternate account representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under the* CO_2 *Budget Trading Program shall be deemed to be an electronic submission by me."*
 - 6.2.2.5.3.4.2 "Until this notice of delegation is superseded by another notice of delegation under 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 CO₂ Budget Trading Program is terminated."
 - 6.2.2.5.4 A notice of delegation submitted under subsection 6.2.2.5.3 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 electronic submission agent, add a new electronic submission agent, or eliminate entirely any delegation of authority.
 - 6.2.2.5.5 Any electronic submission covered by the certification in subsection 6.2.2.5.3.4.1 and made in accordance with a notice of delegation effective under subsection 6.2.2.5.4 shall be deemed to be an electronic submission by the CO_2 authorized account representative or CO_2 authorized alternate account representative submitting such notice of delegation.
- 6.2.3 *Account identification*. The Department or its agent will assign a unique identifying number to each account established under subsections 6.2.1 or 6.2.2.
- 6.3 CO₂ Allowance Tracking System responsibilities of CO₂ authorized account representative.

Following the establishment of a CO_2 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 CO_2 allowances in the account, shall be made only by the CO_2 authorized account representative for the account.

- 6.4 Recordation of CO₂ allowance allocations.
 - 6.4.1 By January 1 of each calendar year, the Department or its agent will record in the Delaware Auction accounts.
 - 6.4.2 By January 1, 2010 and each January thereafter, the Department or its agent will record in the Delaware Auction Account the CO₂ allowances for the allocation year three years in the future.
 - 6.4.3 Serial numbers for allocated CO_2 allowances. When allocating CO_2 allowances to and recording them in an account, the Department or its agent will assign each CO_2 allowance a unique identification number that will include digits identifying the year for which the CO_2 allowance is allocated.
 - 6.4.4 On or before December 31, 2009, the Department shall record any ERAs awarded pursuant to subsection 5.3.3 in the CO₂ budget source's compliance account.
 - 6.4.5 By January 1, 2009, the Department or its agent will record in the CO_2 budget source's compliance account the CO_2 allowances for allocation years of 2009, 2010, 2011, 2012 and 2013 pursuant to the amounts established by subsection 5.3.

6.5 Compliance.

- 6.5.1 Allowances available for compliance deduction. 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 subsection 1.5.3 for a control period or an interim control period.
 - 6.5.1.1 The CO₂ allowances, other than CO₂ offset allowances, are of allocation years that fall within a prior control period or the same control period or an interim control period for which the allowances will be deducted.
 - 6.5.1.2 The CO₂ allowances are held in the CO₂ budget source's compliance account as of the CO₂ allowance transfer deadline for that control period or an interim control period or are transferred into the compliance account by a CO₂ allowance transfer correctly submitted for recordation under subsection 7.1 by the CO₂ allowance transfer deadline for that control period or an interim control period.
 - 6.5.1.3 For CO_2 offset allowances, the number of CO_2 offset allowances that are available to be deducted in order for a CO_2 budget source to comply with the CO_2 requirements of subsection 1.5.3 for a control period or an interim control period may not exceed the number of tons representing the following percentages of the CO_2 budget source's CO_2 emissions for that control period, or of 0.50 times the CO_2 budget source's CO_2 emissions for an interim control period, as determined in accordance with Sections 6.0 and 8.0.
 - 6.5.1.4 The CO_2 allowances are not necessary for deductions for excess emissions for a prior control period under subsection 6.5.4.
- 6.5.2 Deductions for compliance. Following the recordation, in accordance with subsection 7.2, of CO_2 allowance transfers submitted for recordation in the CO_2 budget source's compliance account by the CO_2 allowance transfer deadline for a control period or interim control period, the Department or its agent will deduct CO_2 allowances available under subsection 6.1 to cover the source's CO_2 emissions (as determined in accordance with Section 8.0 for the control period, as follows:
 - 6.5.2.1 until the amount of CO_2 allowances deducted equals the number of tons of total CO_2 emissions, (or 0.50 times the number of tons of total CO_2 emissions for an interim control period), less any CO_2 emissions attributable to the burning of eligible biomass, determined in accordance with Section 8.0, from all CO_2 budget units at the CO_2 budget source for the control period; or interim control period or
 - 6.5.2.2 If there are insufficient CO₂ allowances to complete the deductions subsection 6.2.1, until no more CO₂ allowances available under subsection 6.5.1 remain in the compliance account.

- 6.5.3 Identification of available CO₂ allowances by serial number; default compliance deductions.
 - 6.5.3.1 The CO_2 authorized account representative for a source's compliance account may request that specific CO_2 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 subsections 6.5.2 or 6.5.4. Such identification shall be made in the compliance certification report submitted in accordance with subsection 4.1.
 - 6.5.3.2 The Department or its agent will deduct CO_2 allowances for a control period or interim control period from the CO_2 budget source's compliance account, in the absence of identification or in the case of a partial identification of available CO_2 allowances by serial number under subsection 6.5.3.1, in the following order:
 - 6.5.3.2.1 First, subject to the relevant compliance deduction limitations under subsections 6.5.1.3 and 6.5.4.1, 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 before higher serial number allowances.
 - 6.5.3.2.2 Second, any CO₂ allowances, other than CO₂ offset allowances, which are available for deduction under subsection 6.5.1. 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.
- 6.5.4 Deductions for excess emissions.
 - 6.5.4.1 After making the deductions for compliance under subsection 6.5.2, the Department or its agent will deduct from the CO_2 budget source's compliance account a number of CO_2 allowances, equal to three times the number of the source's excess emissions. In the event that a source has insufficient CO_2 allowances to cover three times the number of the source's excess emissions, the source shall be required to immediately transfer sufficient allowances into its compliance account. No CO_2 offset allowances may be deducted to account for the source's excess emissions.
 - 6.5.4.2 Any CO₂ allowance deduction required under subsection 6.5.4.1 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.
 - 6.5.4.2.1 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.
 - 6.5.4.2.2 Each ton of excess emissions is a separate violation.
 - 6.5.4.2.3 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.
 - 6.5.4.2.4 Each ton of excess interim emissions is a separate violation.
 - 6.5.4.3 The propriety of the Department's determination that a CO₂ budget source had excess emissions and the concomitant deduction of CO₂ allowances from that CO₂ budget source's account may be later challenged in the context of the initial 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 CO_2 allowances resulting from the Department's original determination that the relevant CO_2 budget source has had excess emissions. Should the Department's determination of the existence or extent of the CO_2 budget source's excess emissions be revised either by a settlement or final conclusion of any administrative or judicial action, the Department will act as follows.

- 6.5.4.3.1 In any instance where the Department's determination of the extent of excess emissions was too low, the Department will take further action under subsections 6.5.4.1 and 6.5.4.2 to address the expanded violation.
- 6.5.4.3.2 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 from which they were originally deducted.
- 6.5.5 The Department or its agent will record in the appropriate compliance account all deductions from such an account pursuant to subsections 6.5.2 and 6.5.4.
- 6.5.6 Action by the Department on submissions.
 - 6.5.6.1 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.
 - 6.5.6.2 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 subsection 6.5.6.1.
- 6.6 Banking.

Each CO_2 allowance that is held in a compliance account or a general account will remain in such account unless and until the CO_2 allowance is deducted or transferred under subsections 4.2, 6.5, 6.7, or Section 7.0.

6.7 Account error.

The Department or its agent may, at its sole discretion and on his or her own motion, correct any error in any CO_2 Allowance Tracking System account. Within 10 business days of making such correction, the Department or its agent will notify the CO_2 authorized account representative for the account.

- 6.8 Closing of general accounts.
 - 6.8.1 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 subsection 7.1 a CO₂ allowance transfer of all CO₂ allowances in the account to one or more other CO₂ Allowance Tracking System accounts.
 - 6.8.2 If a general account shows no activity for a period of one year 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 30 business days after the notice is sent. The account will be closed after the 30-day period unless before the end of the 30-day period the Department or its agent receives a correctly submitted transfer of CO₂ allowances into the account under subsection 7.1 or a statement submitted by the CO₂ authorized account representative demonstrating to the satisfaction of 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.

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TITLE 7 NATURAL RESOURCES & ENVIRONMENTAL CONTROL DELAWARE ADMINISTRATIVE CODE

12/11/18

7.0 CO₂ Allowance Transfers

7.1 Submission of CO₂ allowance transfers.

The CO_2 authorized account representatives seeking recordation of a CO_2 allowance transfer shall submit the transfer to the Department or its agent. To be considered correctly submitted, the CO_2 allowance transfer shall include the following elements in a format specified by the Department or its agent:

- 7.1.1 The numbers identifying both the transferor and transferee accounts;
- 7.1.2 A specification by serial number of each CO₂ allowance to be transferred;
- 7.1.3 The printed name and signature of the CO₂ authorized account representative of the transferor account and the date signed;
- 7.1.4 The date of the completion of the last sale or purchase transaction for the allowance, if any; and
- 7.1.5 The purchase or sale price of the allowance that is the subject of a sale or purchase transaction under subsection 7.1.4.
- 7.2 Recordation.
 - 7.2.1 Within 5 business days of receiving a CO_2 allowance transfer, except as provided in subsection 7.2.2, the Department or its agent will record a CO_2 allowance transfer by moving each CO_2 allowance from the transferor account to the transferee account as specified by the request, provided that:
 - 7.2.1.1 The transfer is correctly submitted under subsection 7.1; and
 - 7.2.1.2 The transferor account includes each CO_2 allowance identified by serial number in the transfer.
 - 7.2.2 A CO_2 allowance transfer into or out of a compliance account that is submitted for recordation following the CO_2 allowance transfer deadline and that includes any CO_2 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 CO_2 allowance transfer deadline applies will not be recorded until after completion of the process pursuant to subsection 6.5.2.
 - 7.2.3 Where a CO_2 allowance transfer submitted for recordation fails to meet the requirements of subsection 7.2.1, the Department or its agent will not record such transfer.
- 7.3 Notification.
 - 7.3.1 Notification of recordation. Within 5 business days of recordation of a CO_2 allowance transfer under subsection 7.2, the Department or its agent will notify each party to the transfer. Notice will be given to the CO_2 authorized account representatives of both the transferor and transferee accounts.
 - 7.3.2 *Notification of non-recordation.* Within 10 business days of receipt of a CO₂ allowance transfer that fails to meet the requirements of subsection 7.2.1, the Department or its agent will notify the CO₂ authorized account representatives of both accounts subject to the transfer of:
 - 7.3.2.1 A decision not to record the transfer, and
 - 7.3.2.2 The reasons for such non-recordation.
 - 7.3.3 Nothing in this regulation shall preclude the submission of a CO₂ allowance transfer for recordation following notification of non-recordation.
 - 17 DE Reg. 644 (12/01/13)

22 DE Reg. 511 (12/01/18)

12/11/18

8.0 Monitoring and Reporting

8.1 General requirements.

The owners and operators, and to the extent applicable, the CO_2 authorized account representative of a CO_2 budget unit, shall comply with the monitoring, recordkeeping and reporting requirements as provided in this regulation and all applicable sections of 40 CFR 75. Where referenced in Section 8.0, the monitoring requirements of 40 CFR 75 shall be adhered to in a manner consistent with the purpose of monitoring and reporting CO_2 mass emissions pursuant to these regulations. For purposes of complying with such requirements, the definitions in subsection 1.3 and in 40 CFR 72.2 shall apply, and the terms "affected unit,"

"designated representative," and "continuous emissions monitoring system" (or "CEMS") in 40 CFR 75 shall be replaced by the terms "CO₂ budget unit," "CO₂ authorized account representative," and "continuous emissions monitoring system" (or "CEMS"), respectively, as defined in subsection 1.3.

For units not subject to an Acid Rain emissions limitation, the term "Administrator" in 40 CFR 75 shall be replaced with "the Department or its agent." Owners or operators of a CO_2 budget unit who monitor a non- CO_2 budget unit pursuant to the common, multiple, or bypass stack procedures in 40 CFR 75.72(b)(2)(ii), or 40 CFR 75.16 (b)(2)(ii)(B) as pursuant to 40 CFR 75.13, for purposes of complying with [these regulations], shall monitor and report CO_2 mass emissions from such non- CO_2 budget unit according to the procedures for CO_2 budget units established in subsections 8.1 through 8.7.

- 8.1.1 *Requirements for installation, certification, and data accounting.* The owner or operator of each CO₂ budget unit must meet the following requirements.
 - 8.1.1.1 Install all monitoring systems necessary to monitor CO₂ mass emissions in accordance with 40 CFR 75, except for equation G-1. Equation G-1 in Appendix G shall not be used to determine CO₂ emissions under this Regulation for determining CO2 mass emissions from coal-fired units. This may require systems to monitor CO₂ concentration, stack gas flow rate, O₂ concentration, heat input, and fuel flow rate.
 - 8.1.1.2 Successfully complete all certification tests required under subsection 8.2 and meet all other requirements and 40 CFR 75 applicable to the monitoring systems under subsection 8.1.1.
 - 8.1.1.3 Record, report and quality-assure the data from the monitoring systems under subsection 8.1.1.
- 8.1.2 *Compliance dates.* The owner or operator shall meet the monitoring system certification and other requirements of subsections 8.1.1 through 8.1.3 on or before the following dates. The owner or operator shall record, report and quality-assure the data from the monitoring systems under subsections 8.1.1 on and after the following dates.
 - 8.1.2.1 The owner or operator of a CO_2 budget unit, except for a CO_2 budget unit under subsection 8.1.2.2, that commences commercial operation before July 1, 2008, must comply with the requirements by January 1, 2009.
 - 8.1.2.2 The owner or operator of a CO_2 budget unit that commences commercial operation on or after July 1, 2008 must comply with the requirements by the later of the following dates:
 - 8.1.2.2.1 January 1, 2009; or
 - 8.1.2.2.2 The earlier of:
 - 8.1.2.2.2.1 90 unit operating days after the date on which the unit commences commercial operation; or
 - 8.1.2.2.2.2 180 calendar days after the date on which the unit commences commercial operation.
 - 8.1.2.3 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 subsections 8.1.2.1 or 8.1.2.2 by the earlier of:
 - 8.1.2.3.1 90 unit operating days after the date on which emissions first exit to the atmosphere through the new stack or flue; or
 - 8.1.2.3.2 180 calendar days after the date on which emissions first exit to the atmosphere through the new stack or flue.
- 8.1.3 Reporting data.
 - 8.1.3.1 Except as provided in subsection 8.1.3.2, the owner or operator of a CO₂ budget unit that does not meet the applicable compliance date set forth in subsections 8.1.2.1, 8.1.2.2 and 8.1.2.3 for any monitoring system under subsection 8.1.1 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 CFR 75.31(b)(2) or (c)(3), or section 2.4 of Appendix D of 40 CFR 75 as applicable.
 - 8.1.3.2 The owner or operator of a CO_2 budget unit that does not meet the applicable compliance date set forth in subsection 8.2.3 for any monitoring system under subsection 8.1.1 of this regulation shall, for each such monitoring system, determine, record, and report substitute data using the

applicable missing data procedures in Subpart D, or Appendix D of 40 CFR 75, 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 subsection 8.2.3.

- 8.1.3.3
 - 8.1.3.3.1 CO₂ budget units subject to an acid rain emissions limitation (7 DE Admin. Code 1136) or the NOx Budget Trading Program (7 DE Admin. Code 1139) CSAPR NOx Ozone Season Trading Program that qualify for the optional SO₂, NO_X, and CO₂ (for acid rain) or NOx (for NOx Budget) emissions calculations for low mass emissions CSAPR NOx Ozone Season Trading Program (LME) units under 40 CFR 75.19 and report emissions for such programs using the calculations under 40 CFR 75.19, shall also use the CO₂ emissions calculations for LME units under 40 CFR 75.19 for purposes of compliance with these regulations (7 DE Admin. Code 1139).
 - 8.1.3.3.2 CO_2 budget units subject to an acid rain emissions limitation (7 **DE Admin. Code** 1136) that do not qualify for the optional SO₂, NO_X, and CO₂ (for acid rain) or NOx (NOx Budget) emissions calculations for LME units under 40 CFR 75.19, shall not use the CO₂ emissions calculations for LME units under 40 CFR 75.19 for purposes of compliance with these regulations.
 - 8.1.3.3.3 CO₂ budget units not subject to an acid rain emissions limitation (Regulation 1136) shall qualify for the optional CO₂ emissions calculation for LME units under 40 CFR 75.19, provided that they emit less than 100 tons of NO_X annually and no more than 25 tons of SO₂ annually.

8.1.4 Prohibitions.

- 8.1.4.1 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 subsection 8.6.
- 8.1.4.2 No owner or operator of a CO_2 budget unit shall operate the unit so as to discharge, or allow to be discharged, CO_2 emissions to the atmosphere without accounting for all such emissions in accordance with the applicable provisions and 40 CFR 75.
- 8.1.4.3 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 and 40 CFR 75.
- 8.1.4.4 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 this regulation, except under any one of the following circumstances:
 - 8.1.4.4.1 The owner or operator is monitoring emissions from the unit with another certified monitoring system approved, in accordance with the applicable provisions and 40 CFR 75, 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
 - 8.1.4.4.2 The CO₂ authorized account representative submits notification of the date of certification testing of a replacement monitoring system in accordance with subsection 8.2.4.3.1.
- 8.2 Initial certification and recertification procedures.
 - 8.2.1 The owner or operator of a CO_2 budget unit shall be exempt from the initial certification requirements for a monitoring system under subsection 8.1.1.1 if the following conditions are met:
 - 8.2.1.1 The monitoring system has been previously certified in accordance with 40 CFR 75; and
 - 8.2.1.2 The applicable quality-assurance and quality-control requirements of 40 CFR 75.21 and appendix B and appendix D of 40 CFR 75 are fully met for the certified monitoring system described in subsection 8.2.1.1.

- 8.2.2 The recertification provisions shall apply to a monitoring system under subsection 8.1.1.1 exempt from initial certification requirements under subsection 8.2.1.
- 8.2.3 Not withstanding subsection 8.2.1, if the Administrator has previously approved a petition under 40 CFR 75.72(b)(2)(ii), or 40 CFR 75.16(b)(2)(ii)(B) as pursuant to 40 CFR 75.13 for apportioning the CO₂ emissions rate measured in a common stack or a petition under 40 CFR 75.66 of this chapter for an alternative requirement in 40 CFR 75, the CO₂ authorized account representative shall submit the petition to the Department under subsection 8.6.1 to determine whether the approval applies under this program.
- 8.2.4 Except as provided in subsection 8.2.1, 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 appendix D of 40 CFR 75 and under subsection 8.1.1.1. The owner or operator of a unit that qualifies to use the low mass emissions excepted monitoring methodology in 40 CFR 75.19 or that qualifies to use an alternative monitoring system under Subpart E of 40 CFR 75 shall comply with the procedures in subsections 8.5 and 8.6, respectively.
 - 8.2.4.1 *Requirements for initial certification.* The owner or operator shall ensure that each continuous emissions monitoring system required under subsection 8.1.1.1 (which includes the automated data acquisition and handling system) successfully completes all of the initial certification testing required under 40 CFR 75.20 by the applicable deadlines specified in subsection 8.1.2. In addition, whenever the owner or operator installs a monitoring system in order to meet the requirements in a location where no such monitoring system was previously installed, initial certification in accordance with 40 CFR 75.20 is required.
 - 8.2.4.2 *Requirements for recertification.*
 - 8.2.4.2.1 Whenever the owner or operator makes a replacement, modification, or change in a certified continuous emissions monitoring system under subsection 8.1.1.1 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 quality-assurance and quality-control requirements of 40 CFR 75.21 or appendix B to 40 CFR 75, the owner or operator shall recertify the monitoring system according to 40 CFR 75.20(b).
 - 8.2.4.2.2 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 CFR 75.20(b). 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.
 - 8.2.4.3 Approval process for initial certifications and recertification. Subsections 8.2.4.3.1 through 8.2.4.3.4 apply to both initial certification and recertification of a monitoring system under subsection 8.1.1.1. For recertifications, 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 CFR 75.20(b)(5) and (g)(7) in lieu of subsection 8.2.4.3.5.
 - 8.2.4.3.1 *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 subsection 8.4.
 - 8.2.4.3.2 *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 CFR 75.63.
 - 8.2.4.3.3 *Provisional certification data.* The provisional certification date for a monitor shall be determined in accordance with 40 CFR 75.20(a)(3). A provisionally certified monitor may be used under the CO₂ budget Trading Program for a period not to exceed 120 days after receipt by the Department of the complete certification application for the monitoring system or component thereof under subsection 8.2.4.3.2. Data measured and recorded by the provisionally certified monitoring system or component thereof, in accordance with the requirements of 40 CFR 75, will be considered valid quality-assured data (retroactive to the date and time of provisional certification), provided that the Department does not invalidate the

provisional certification by issuing a notice of disapproval within 120 days of receipt of the complete certification application by the Department.

- 8.2.4.3.4 *Certification application approval process.* The Department will issue a written notice of approval or disapproval of the certification application to the owner or operator within 120 days of receipt of the complete certification application under subsection 8.2.4.3.2. In the event the Department does not issue such a notice within such 120-day period, each monitoring system which meets the applicable performance requirements of 40 CFR 75 and is included in the certification application will be deemed certified for use under the CO₂ Budget Trading Program.
 - 8.2.4.3.4.1 Approval notice. If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of 40 CFR 75, then the Department will issue a written notice of approval of the certification application within 120 days of receipt.
 - 8.2.4.3.4.2 *Incomplete application notice.* If the certification application is not complete, then the Department 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 may issue a notice of disapproval under subsection 8.2.4.3.4.3. The 120 day review period shall not begin before receipt of a complete certification application
 - 8.2.4.3.4.3 *Disapproval notice*. If the certification application shows that any monitoring system or component thereof does not meet the performance requirements of 40 CFR 75, or if the certification application is incomplete and the requirement for disapproval under subsection 8.2.4.3.4.2 is met, then the Department 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 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 subsection 8.2.4.3.5 for each monitoring system or component thereof, which is disapproved for initial certification.
 - 8.2.4.3.4.4 *Audit decertification.* The Department may issue a notice of disapproval of the certification status of a monitor in accordance with subsection 8.3.2.
- 8.2.4.3.5 *Procedures for loss of certification.* If the Department issues a notice of disapproval of a certification application under subsection 8.2.4.3.4.3 or a notice of disapproval of certification status under subsection 8.2.4.3.4.4, then:
 - 8.2.4.3.5.1 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 CFR 75.20(a)(5)(i) or 40 CFR 75.20(g)(7):
 - 8.2.4.3.5.1.1 For units using or intending to monitor for CO₂ mass emissions using heat input or for units using the low mass emissions excepted methodology under 40 CFR 75.19, the maximum potential hourly heat input of the unit; or
 - 8.2.4.3.5.1.2 For units intending to monitor for CO_2 mass emissions using a CO_2 pollutant concentration monitor and a flow monitor, the maximum potential concentration of CO_2 and the maximum potential flow rate of the unit under section 2.1 of Appendix A of 40 CFR 75.
 - 8.2.4.3.5.2 The CO₂ authorized account representative shall submit a notification of certification retest dates and a new certification application in accordance with subsections 8.2.4.3.1 and 8.2.4.3.2; and
 - 8.2.4.3.5.3 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 notice of disapproval, no later than 30 unit operating days after the date of issuance of the notice of disapproval.
- 8.2.5 Initial certification and recertification procedures for low mass emissions units using the excepted methodologies under subsection 8.1.3.2. The owner or operator of a unit qualified to use the low mass emissions excepted methodology under subsection 8.1.3.2 shall meet the applicable certification and

recertification requirements of 40 CFR 75.19(a)(2), 40 CFR 75.20(h) and subsection 8.2. 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 CFR 75.20(g).

- 8.2.6 *Certification/recertification procedures for alternative monitoring systems.* The CO₂ authorized account of each unit for which the owner or operator intends to use an alternative monitoring system approved by the Administrator and, if applicable, the Department under Subpart E of 40 CFR 75 shall comply with the applicable notification and application procedures of 40 CFR 75.20(f).
- 8.3 Out-of-control periods.
 - 8.3.1 Whenever any monitoring system fails to meet the quality assurance and quality control requirements or data validation requirements of 40 CFR 75, data shall be substituted using the applicable procedures in Subpart D or Appendix D of 40 CFR 75.
 - 8.3.2 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 subsection 8.2 or the applicable provisions of 40 CFR 75, 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 or recertification tests for the monitoring system. The owner or operator shall follow the initial certification or recertification procedures in subsection 8.2 for each disapproved monitoring system.
- 8.4 Notifications.

The CO_2 authorized account representative for a CO_2 budget unit shall submit written notice to the Department and the Administrator in accordance with 40 CFR 75.61.

- 8.5 Recordkeeping and reporting.
 - 8.5.1 *General provisions.* The CO₂ authorized account representative shall comply with all recordkeeping and reporting requirements in this regulation, the applicable record keeping and reporting requirements under 40 CFR 75.73 and with the requirements of subsection 2.1.5.
 - 8.5.2 *Monitoring plans.* The owner or operator of a CO₂ budget unit shall submit a monitoring plan in the manner prescribed in 40 CFR 75.62.
 - 8.5.3 *Certification applications.* The CO₂ authorized account representative shall submit an application to the Department within 45 days after completing all CO₂ monitoring system initial certification or recertification tests required under subsection 8.2 including the information required under 40 CFR 75.63 and 40 CFR 75.53(e) and (f).
 - 8.5.4 Quarterly reports. The CO₂ authorized account representative shall submit quarterly reports, as follows:
 - 8.5.4.1 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:
 - 8.5.4.1.1 for a unit that commences commercial operation before July 1, 2008, the calendar quarter covering January 1, 2009 through March 31, 2009; or
 - 8.5.4.1.2 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 subsection 8.1.2 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.
 - 8.5.4.2 The CO₂ authorized account representative shall submit each quarterly report to the Department or its agent within 30 days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in Subpart H of 40 CFR 75 and 40 CFR 75.64. 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 CFR 75, except for opacity, NOx, and SO₂ provisions.

- 8.5.4.3 *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:
 - 8.5.4.3.1 The monitoring data submitted were recorded in accordance with the applicable requirements and 40 CFR 75, including the quality assurance procedures and specifications;
 - 8.5.4.3.2 for a unit with add-on CO₂ emissions controls and for all hours where data are substituted in accordance with 40 CFR 75.34(a)(1), the add-on emissions controls were operating within the range of parameters listed in the quality assurance/quality control program under appendix B of 40 CFR 75 and the substitute values do not systematically underestimate CO₂ emissions; and
 - 8.5.4.3.3 The CO₂ concentration values substituted for missing data under Subpart D of 40 CFR 75 do not systematically underestimate CO₂ emissions.

8.6 Petitions.

- 8.6.1 Except as provided in subsection 8.6.3, 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 CFR 75.66 and to the Department requesting approval to apply an alternative to any requirement of 40 CFR 75. Application of an alternative to any requirement of 40 CFR 75 is in accordance with this regulation only to the extent that the petition is approved in writing by the Administrator, and subsequently approved in writing by the Department.
- 8.6.2 Petitions for a CO₂ budget unit that is not subject to an Acid Rain emissions limitation.
 - 8.6.2.1 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 CFR 75.66 and to the Department requesting approval to apply an alternative to any requirement of 40 CFR 75. Application of an alternative to any requirement of 40 CFR 75 is in accordance with this regulation only to the extent that the petition is approved in writing by the Administrator and subsequently approved in writing by the Department.
 - 8.6.2.2 In the event that the Administrator declines to review a petition under subsection 8.6.2.1, 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 Department requesting approval to apply an alternative to any requirement of Section 8.0. That petition shall contain all of the relevant information specified in 40 CFR 75.66. Application of an alternative to any requirement of Section 8.0 only to the extent that the petition is approved in writing by the Department.
- 8.6.3 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 CFR 75.66 and to the Department requesting approval to apply an alternative to a requirement concerning any additional CEMS required under the common stack provisions of 40 CFR 75.72 or a CO₂ concentration CEMS used under 40 CFR 75.71(a)(2). Application of an alternative to any such requirement is in accordance with this regulation only to the extent the petition is approved in writing by the Administrator and subsequently approved in writing by the Department.
- 8.7 CO₂ budget units that co-fire eligible biomass.
 - 8.7.1 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:
 - 8.7.1.1 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.
 - 8.7.1.2 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.

- 8.7.1.3 For each distinct type of gaseous eligible biomass fuel fired at the CO₂ budget unit, the density of the biogas, on an as-fired basis, in pounds per standard cubic foot.
- 8.7.1.4 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.
- 8.7.1.5 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.
- 8.7.1.6 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.
- 8.7.1.7 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.
- 8.7.1.8 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 subsection 8.7.2.
- 8.7.1.9 The total amount of CO_2 emitted from the CO_2 budget unit due to firing eligible biomass fuel, in tons, calculated in accordance with subsection 8.7.3.
- 8.7.1.10 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 subsection 8.7.4.1.
- 8.7.1.11 The total amount of heat input to the CO₂ budget unit due to firing eligible biomass fuel, in MMBtu, calculated in accordance with subsection 8.7.4.2.
- 8.7.1.12 Description and documentation of monitoring technology employed, and description and documentation of fuel sampling methodology employed, including sampling frequency; and,
- 8.7.1.13 For each distinct type of eligible biomass fuel fired at the CO₂ budget unit, chemical analysis, including heating value and carbon content.
- 8.7.2 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:
 - 8.7.2.1 For solid fuel types:

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

Where:

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

F_i = Eligible biomass as fired 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.

8.7.2.2 For gaseous fuel types:

 $F_i = D_i \times V_i \times (1 - M_i)$

Where:

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

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

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

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

j = fuel type.

- 8.7.3 CO₂ emissions due to firing of eligible biomass shall be determined as follows:
 - 8.7.3.1 For any full calendar quarter during which no fuel other than eligible biomass is combusted at the CO_2 budget unit, as measured and recorded in accordance with subsections 8.1 through 8.6; or

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8.7.3.2 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:

$$CO_2 \ tons = \sum_{j=1} F_j \times C_j \times O_j \times \frac{44}{12} \times 0.0005$$

Where:

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

F_i = Total eligible biomass dry basis fuel input (lbs) for fuel type j, as calculated in subsection 8.7.2;

- C_i = 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 subsection 8.7.1.12; for gaseous eligible biomass fuels, a default oxidation factor of 0.995 may be used;
- 44/12 = The number of tons of carbon dioxide that are created when one ton of carbon is combusted (44/12);

0.0005 = The number of short tons which is equal to one pound;

j = fuel type; and,

n = number of distinct fuel types.

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

 $H_i = F_i \times HHV_i \times 0.0005$

Where:

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

F_i = Total eligible biomass dry basis fuel input (lbs) for fuel type j, as calculated in subsection 8.7.2;

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

j = fuel type.

8.7.4.2 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.
- 8.7.5 Fuel sampling methods and fuel sampling technology shall be consistent with the New York State Renewable Portfolio Standard Biomass Guidebook, September 2011.
- 8.8 Additional requirements to provide output data.
 - 8.8.1 A CO₂ budget unit that requires the use of information submitted to the Regional Transmission Organization (RTO) to document megawatt-hours (MWh) the CO₂ budget unit produces shall submit to the Department or its agent the same MWh value submitted to the RTO and a statement certifying that the MWh of electrical output reported reflects the total actual electrical output for all CO₂ budget units at the facility used by the RTO to determine settlement resources of energy market participants.
 - 8.8.2 A CO₂ budget unit that requires gross output to be used that also reports gross hourly MW to the Administrator, shall use the same electronic data report (EDR) gross output (in MW), as submitted to the Administrator, for the hour times operating time in the hour, added for all hours in a year. A CO₂ budget unit that does not report gross hourly MW to the Administrator shall submit to the Department or its agent information in accordance with subsection 8.8.5.1.

- 8.8.3 A CO₂ budget unit that requires net electrical output shall submit to the Department or its agent information in accordance with subsection 8.8.5.1. A CO₂ budget source whose electrical output is not used in the RTO energy market settlement determinations shall propose to the Department a method for quantification of net electrical output.
- 8.8.4 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 non-CO₂ budget unit prior to measurement by the billing meter shall propose to the Department 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.
- 8.8.5 *Monitoring.* The owner or operator of each CO_2 budget unit, in a state that requires the CO_2 budget unit's net output, must meet the following requirements. Each CO_2 budget source must submit an output monitoring plan. The output monitoring plan must include a description and diagram as stated below.
 - 8.8.5.1 Submit a diagram of the electrical and/or steam system for which output is being monitored, specifically including the following.
 - 8.8.5.1.1 If the CO₂ budget unit monitors net electric output, the diagram should contain all CO₂ budget units and all generators served by each CO₂ budget unit and the relationship between CO₂ budget units and generators. If a generator served by a CO₂ budget unit is also served by a non-affected unit, the non-affected 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.
 - 8.8.5.1.2 If the CO₂ budget unit monitors net thermal output, the diagram should include all steam or hot water coming into the net steam system, including steam from CO₂ budget units and non-affected 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.
 - 8.8.5.2 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 output systems descriptions and justifications of each useful load should be included.
 - 8.8.5.3 Submit a detailed description of all quality assurance/quality control activities that will be performed to maintain the output system in accordance with subsection 8.8.5.
 - 8.8.5.4 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 regulation.
- 8.8.6 *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 at subsection 8.8.4.2. This statement may be submitted with the certification application required under subsection 8.5.3.
 - 8.8.6.1 *Billing meters*. The billing meter must 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.

- 8.8.6.2 *Non-billing meters.* For non-billing meters, the output monitoring system must either meet an accuracy of within 10% of the reference value, or each component monitor for the output system must meet an accuracy of within 3% of the full scale value, whichever is less stringent.
 - 8.8.6.2.1 System approach to accuracy. The system approach to accuracy must include a determination of how the system accuracy of 10% is achieved using the individual components in the system and should include data loggers and any watt-meters used to calculate the final net electric output data and/or any flow meters for steam or condensate, temperature measurement devices, absolute pressure measurement devices, and differential pressure devices used for measuring thermal energy.
 - 8.8.6.2.2 *Component approach to accuracy.* If testing a piece of output measurement equipment shows that the output readings are not accurate to within 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.
- 8.8.7 Ongoing QA/QC. Ongoing quality assurance/quality control activities must be performed in order to maintain the output system.
 - 8.8.7.1 *Billing meters*. In the case where billing meters are used to determine output, no QA/QC activities beyond what are already performed are required.
 - 8.8.7.2 *Non-billing meters.* Certain types of equipment such as potential transformers, current transformers, nozzle and venturi 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 other types of equipment, either recalibrate or re-verify the meter accuracy at least once every two years (i.e., every eight 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 10% of the reference value, or each component monitor for the output system must meet an accuracy of within 3% of the full scale value, whichever is less stringent. If testing a piece of output measurement equipment shows that the output readings are not accurate to within 3.0 percent of the full scale value, then the equipment should be repaired or replaced to meet that requirement.
 - 8.8.7.3 *Out-of-control periods*. 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 subsection 8.8.5.
- 8.8.8 *Recordkeeping and reporting.*
 - 8.8.8.1 *General provisions.* The CO₂ authorized account representative shall comply with all recordkeeping and reporting requirements in this regulation and with the requirements of subsections 1.5.5 and 2.1.5.
 - 8.8.8.2 *Recordkeeping.* Facilities shall retain data used to monitor, determine, or calculate net generation for ten years.
 - 8.8.8.3 Annual reports. 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 unit level MWh, all useful steam output and a certification statement from the CO₂ authorized account representative stating the following,

"I am authorized to make this submission on behalf of the owners and operators of the CO_2 budget sources or CO_2 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."

17 DE Reg. 644 (12/01/13) 22 DE Reg. 511 (12/01/18)

12/11/18

9.0 Auction of CO₂ CCR and ECR allowances

- 9.1 Purpose.
 - 9.1.1 The following rules shall apply to each allowance auction. The Department may specify additional information in the auction notice for each auction. Such additional information may include the time and location of the auction, auction rules, registration deadlines, and any additional information deemed necessary or useful.
- 9.2 General Requirements
 - 9.2.1 The Department or its agent shall include the following information in the auction notice for each auction:
 - 9.2.1.1 The number of CO₂ allowances offered for sale at the auction, not including any CO₂ CCR allowances;
 - 9.2.1.2 The number of CO₂ CCR allowances that will be offered for sale at the auction if the condition of subsection 9.2.2.1 of this section is met;
 - 9.2.1.3 The minimum reserve price for the auction;
 - 9.2.1.4 The CCR trigger price for the auction;
 - 9.2.1.5 The maximum number of CO_2 allowances that may be withheld from sale at the auction if the condition of subsection 9.2.4.1 of this section is met; and
 - 9.2.1.6 The ECR trigger price for the auction.
 - 9.2.2 The Department shall follow these rules for the sale of CO₂ CCR allowances:
 - 9.2.2.1 CO₂ CCR allowances shall only be sold at an auction in which total demand for allowances, above the CCR trigger price, exceeds the number of CO₂ allowances available for purchase at the auction, not including any CO₂ CCR allowances.
 - 9.2.2.2 If the condition of subsection 9.2.2.1 is met at an auction, then the number of CO_2 CCR allowances offered for sale by the Department at the auction shall be equal to the number of CO_2 CCR allowances in the State of Delaware auction account at the time of the auction.
 - 9.2.2.3 After all of the CO₂ CCR allowances in the State of Delaware auction have been sold in a given calendar year, no CO₂ CCR allowances will be sold at the auction, even if the condition of subsection 9.2.2.1 is met at an auction; and
 - 9.2.2.4 At an auction in which CO₂ CCR allowances are sold, the reserve price at for the auction shall be the CCR trigger price.
 - 9.2.2.5 If the condition of subsection 9.2.2.1 is not satisfied, no CO₂ CCR allowances shall be offered for sale at the auction, and the reserve price for the auction shall be equal to the minimum reserve prices.
 - 9.2.3 The Department shall implement the reserve price in the following manner:
 - 9.2.3.1 No allowances shall be sold at any auction for a price below the reserve price for that auction; and
 - 9.2.3.2 If the total demand for allowances at an auction is less than or equal to the total number of allowances made available for sale in that auction, then the auction clearing price for the auction shall be the reserve price.
 - 9.2.4 The Department or its agent shall follow these rules for the withholding of CO₂ ECR allowances from an auction:
 - 9.2.4.1 CO₂ ECR allowances shall only be withheld from an auction if the demand for allowances would result in an auction clearing price that is less than the ECR trigger price prior to the withholding from the auction of any ECR allowances.

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9.2.4.2 If the condition in subsection 9.2.4.1 is met at an auction, then the maximum number of CO_2 ECR allowances that may be withheld from that auction will be equal to the quantity shown in subsection 5.3.5.1 minus the total quantity of CO_2 ECR allowances that have been withheld from any prior auction in that calendar year. Any CO_2 ECR allowances withheld from an auction will be transferred into the State of Delaware ECR Account.

17 DE Reg. 644 (12/01/13)

22 DE Reg. 511 (12/01/18)

12/11/18

10.0 CO₂ Emissions Offset Projects

10.1 Purpose

The Department will provide for the award of CO_2 offset allowances to sponsors of CO_2 emissions offset projects that have reduced or avoided atmospheric loading of CO_2 , CO_2 equivalent or sequestered carbon as demonstrated in accordance with the applicable provisions. The requirements seek to ensure that CO_2 offset allowances awarded represent CO_2 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 subsection 6.5.1.3, CO_2 offset allowances may be used by any CO_2 budget source for compliance purposes.

- 10.2 RESERVED
- 10.3 General requirements
 - 10.3.1 *Eligible CO₂ emissions offset projects.* To qualify for the award of CO₂ offset allowances, offset projects shall satisfy all the applicable requirements of Section 10.0.
 - 10.3.1.1 *Offset project types*. The following types of offset projects are eligible for the award of CO₂ offset allowances.
 - 10.3.1.1.1 Landfill methane capture and destruction;
 - 10.3.1.1.2 Sequestration of carbon due to reforestation, improved forest management, or avoided conversion;
 - 10.3.1.1.3 Avoided methane emissions from agricultural manure management operations.
 - 10.3.1.2 Offset project locations.
 - 10.3.1.2.1 To qualify for the award of CO₂ allowances under Section 10.0, eligible offset projects may be located in any of the following locations:
 - 10.3.1.2.1.1 In the State of Delaware
 - 10.3.1.2.1.2 In any state or 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 Section 10.0.
 - 10.3.1.2.2 Projects located (in whole or in part) in one or more participating states are not eligible for CO₂ offset allowances under Section 10.0 unless more of the CO₂ equivalent emissions reduction or carbon sequestration due to the offset project is projected to occur in the State of Delaware than in any other participating state.
 - 10.3.2 *Project sponsor*. Any person may act as the sponsor of an eligible CO₂ emissions offset project or CO₂ emissions credit retirement, provided that person meets the requirements at subsection 10.4.
 - 10.3.3 *General additionality requirements.* Except as provided with respect to specific offset project standards in subsection 10.5, the following general requirements shall apply.
 - 10.3.3.1 CO₂ offset allowances shall not be awarded to an offset project or CO₂ emissions credit retirement 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 subsection 10.4 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.

- 10.3.3.2 CO₂ offset allowances shall not be awarded to an offset project that includes an electric generation component, unless the project sponsor transfers legal rights to any and all attribute credits (other than the CO₂ offset allowances awarded under subsection 10.7) generated from the operation of the offset project that may be used for compliance with a renewable portfolio standard or other regulatory requirement, to the Department or its agent.
- 10.3.3.3 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 consumer benefit or strategic energy purpose allocation required pursuant to subsection 5.3.2.
- 10.3.3.4 CO₂ offset allowances shall not be awarded to an offset project or CO₂ emissions credit retirement that is awarded credits or allowances under any other mandatory or voluntary greenhouse gas program, except as described in subsection 10.5.2.10.
- 10.3.4 Maximum allocation periods for CO₂ emissions offset projects.
 - 10.3.4.1 *Maximum allocation periods*. Except as provided in subsection 10.3.5.2, the Department may award CO₂ offset allowances under subsection 10.7 for an initial 10-year allocation period. At the end of the initial 10-year allocation period, the Department may award CO₂ offset allowances for a second 10-year allocation period, provided the offset sponsor has submitted a consistency application pursuant to subsection 10.4 prior to the expiration of the initial allocation period, and the Department has issued a consistency determination pursuant to subsection 10.4.5.2.
 - 10.3.4.2 Maximum allocation period for involving reforestation, improved forest management, or avoided conversion. The Department may award CO₂ offset allowances under subsection 10.7 for any involving reforestation, improved forest management, or avoided conversion offset project for an initial 20-year allocation period. At the end of the initial 25-year allocation period, or any subsequent crediting period the Department may award CO₂ offset allowances for a second 25-year allocation period, provided the offset sponsor has submitted a consistency application for the offset project pursuant to subsection 10.4 prior to the expiration of the initial allocation period, and the Department has issued a consistency determination pursuant to subsection 10.4.5.2.
- 10.3.5 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 regulation. 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 regulation.
- 10.3.6 Ineligibility due to noncompliance.
 - 10.3.6.1 If at any time the Department determines that a project sponsor has not complied with the requirements, then the Department may revoke and retire any and all CO₂ offset allowances in the project sponsor's account.
 - 10.3.6.2 If at any time the Department determines that an offset project does not comply with the requirements, then the Department may revoke any approvals it has issued relative to an offset project.
- 10.4 Application process
 - 10.4.1 *Establishment of general account.* The sponsor of an offset project must establish a general account under subsection 6.2.2. All submissions to the Department required for the award of CO₂ offset allowances under this regulation 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."
 - 10.4.2 Consistency application deadlines.
 - 10.4.2.1 For offset projects not involving reforestation, improved forest management, or avoided conversion the consistency application must be submitted by the date that is 6 months after the offset project is commenced.

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- 10.4.2.2 For offset projects involving reforestation, improved forest management, or avoided conversion the consistency application must be submitted by the date that is one year after the offset project is commenced, except for as described in subsection 10.5.3.9.
- 10.4.2.3 Any consistency application that fails to meet the deadlines will result in the denial of the consistency application and the continued ineligibility of the subject offset project.
- 10.4.3 Consistency application contents.
 - 10.4.3.1 For an offset project, the consistency application must include the following information.
 - 10.4.3.1.1 The project's sponsor's name, address, e-mail address, telephone number, facsimile transmission number, and account number.
 - 10.4.3.1.2 The offset project description as required by the relevant provisions of subsection 10.5.
 - 10.4.3.1.3 A demonstration that the offset project meets all applicable requirements set forth in this regulation.
 - 10.4.3.1.4 The emissions baseline determination as required by the relevant provisions of subsection 10.5.
 - 10.4.3.1.5 An explanation of how the projected reduction or avoidance of atmospheric loading of CO_2 or CO_2 equivalent or the sequestration of carbon is to be quantified, monitored, and verified as required by the relevant provisions of subsection 10.5.
 - 10.4.3.1.6 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 Section 10.0. 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 Section 10.0 is contingent on meeting the requirements of Section 10.0. 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 Delaware."

- 10.4.3.1.7 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 regulation (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.
- 10.4.3.1.8 A verification report and certification statement signed by an independent verifier accredited pursuant to subsection 10.6 that expresses that the independent verifier has reviewed the entire application and evaluated the following in relation to the applicable requirements of subsections 10.3 and 10.5, and any applicable guidance issued by the Department.
 - 10.4.3.1.8.1 The adequacy and validity of information supplied by the project sponsor to demonstrate that the offset project meets the applicable eligibility requirements of subsections 10.3 and 10.5.
 - 10.4.3.1.8.2 The adequacy and validity of information supplied by the project sponsor to demonstrate baseline emissions pursuant to the applicable requirements of subsection 10.5.
 - 10.4.3.1.8.3 The adequacy of the monitoring and verification plan submitted pursuant to the applicable requirements of subsection 10.5.
 - 10.4.3.1.8.4 Such other evaluations and statements as may be required by the Department.
- 10.4.3.1.9 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.
- 10.4.3.1.10 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.

- 10.4.3.2 Consistency applications shall be submitted in a format approved by the Department.
- 10.4.4 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 the State of Delaware than in any other participating state.
- 10.4.5 *Department action on consistency applications.*
 - 10.4.5.1 *Completeness determination*. Within 30 days following receipt of the consistency application filed pursuant to subsection 10.4.2, 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. In no event shall a completeness determination prevent the Department from requesting additional information in order to enable the Department to make a consistency determination under subsection 10.4.5.2.
 - 10.4.5.2 *Consistency determination*. Within 90 days of making the completeness determination under subsection 10.4.5.1, the Department will issue a determination as to whether the offset project is consistent with the requirements of subsections 10.3 and 10.4 and the requirements of the applicable offset project standard of subsection 10.5. For any offset project found to lack consistency with these requirements, the Department will inform the project sponsor of the offset project's deficiencies.
- 10.5 CO₂ emissions offset project standards
 - 10.5.1 Landfill methane capture and destruction. To qualify for the award of CO₂ offset allowances under Section 10.0, offset projects that capture and destroy methane from landfills shall meet the requirements of subsection 10.5.1 and all other applicable requirements of Section 10.0.
 - 10.5.1.1 *Eligibility.* Eligible offset projects shall occur at landfills that are not subject to the New Source Performance Standards (NSPS) for municipal solid waste landfills, 40 CFR 60, Section Cc and Section WWW.
 - 10.5.1.2 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 subsection 10.5.1.1. The project narrative shall include the following information.
 - 10.5.1.2.1 Owner and operator of the offset project;
 - 10.5.1.2.2 Location and specifications of the landfill where the offset project will occur, including waste in place;
 - 10.5.1.2.3 Owner and operator of the landfill where the offset project will occur; and
 - 10.5.1.2.4 Specifications of the equipment to be installed and a technical schematic of the offset project.
 - 10.5.1.3 *Emissions baseline determination*. The emissions baseline shall represent the potential fugitive landfill emissions of CH_4 (in tons of CO_2e), as represented by the CH_4 collected and metered for thermal destruction as part of the offset project, and calculated in accordance with this paragraph. Emissions (tons CO_2e) = (V x M x (1-OX) x GWP)/2000

Where:

V = Volume of CH_4 collected (ft³)

- M = Mass of CH₄ per cubic foot (0.04246 lbs/ft³ default value at 1 atmosphere and 20^o C)
- OX = Oxidation factor (0.10), representing estimated portion of collected CH_4 that would have eventually oxidized to CO_2 if not collected

GWP = CO_2e global warming potential of CH_4 (28)

10.5.1.4 *Calculating emissions reductions*. Emissions reductions shall be determined based on potential fugitive CH₄ emissions that would have occurred at the landfill if metered CH₄ 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:

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Emissions Reductions (tons CO_2e) = (V x M x (1 - OX) x C_{ef} x GWP)/2000 Where:

- V = Volume of CH_4 collected (ft³)
- M = Mass of CH₄ 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 CH_4 that would have eventually oxidized to CO_2 if not collected
- C_{ef} = Combustion efficiency of methane control technology (0.98)

GWP = CO_2e global warming potential of CH_4 (28)

- 10.5.1.5 *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 CH₄ concentration. Annual monitoring and verification reports shall include monthly volumetric flow rate and CH₄ concentration data, including documentation that the CH₄ was actually supplied to the combustion source. Monitoring and verification is also subject to the following requirements.
 - 10.5.1.5.1 The project sponsor shall submit a monitoring and verification plan as 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 CH₄ 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 subsection 10.6.
 - 10.5.1.5.2 The project sponsor shall annually verify landfill gas CH₄ composition through landfill gas sampling and independent laboratory analysis using applicable U.S. Environmental Protection Agency laboratory test methods.
- 10.5.2 RESERVED
- 10.5.3 Sequestration of carbon due to reforestation, improved forest management, or avoided conversion. To qualify for the award of CO₂ offset allowances under Section 10.0, offset projects that involve reforestation, improved forest management, or avoided conversion shall meet all requirements of subsection 10.5.3 and the forest offset protocol and all other applicable requirements of Section 10.0.
 - 10.5.3.1 *Eligibility.* Eligible forest offset projects shall satisfy all eligibility requirements of the forest offset protocol and subsection 10.5.3.
 - 10.5.3.2 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 subsection 10.5.3.1. The offset project narrative shall include the information identified in subsections 8.1 and 9.1 of the forest offset protocol, and any other information deemed necessary by the Department.
 - 10.5.3.3 *Carbon sequestration baseline determination*. Baseline onsite carbon stocks shall be determined as required by subsections 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.
 - 10.5.3.4 Calculating carbon sequestered. Net GHG reductions and GHG removal enhancements shall be calculated as required by Section 6.0 of the forest offset protocol. The project's risk reversal rating shall be calculated using the forest offset protocol Determination of a Forest Project's Reversal Risk Rating assessment worksheet.
 - 10.5.3.5 *Monitoring and verification requirements*. Monitoring and verification is subject to the following requirements.
 - 10.5.3.5.1 Monitoring and verification reports shall include all forest offset project data reports submitted to the Department, including any additional data required by subsection 9.2.2 of the forest offset protocol.
 - 10.5.3.5.2 The consistency application shall include a monitoring and verification plan certified by an independent verifier accredited pursuant to subsection 10.6. The monitoring and verification

plan shall consist of a forest carbon inventory program, as required by subsection 8.1 of the forest offset protocol.

- 10.5.3.5.3 Monitoring and verification reports shall be submitted not less than every six years, except that the first monitoring and verification report for reforestation projects must be submitted within twelve years of project commencement
- 10.5.3.6 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.
- 10.5.3.7 Prior to the award of CO₂ offset allowances pursuant to subsection 10.7, or to any transfer allowances pursuant to subsection 10.5.3.8, any quantity expressed in metric tons, or metric tons of CO₂ equivalent, shall be converted to tons using the conversion factor specified in subsection 1.2.
- 10.5.3.8 *Carbon sequestration permanence*. The offset project shall meet the following requirements to address reversal of sequestered carbon.
 - 10.5.3.8.1 Unintentional reversals. Requirements for unintentional reversals are as follows:
 - 10.5.3.8.1.1 The project sponsor must notify the Department of the reversal and provide an explanation for the nature of the unintentional reversal within 30 calendar days of its discovery; and
 - 10.5.3.8.1.2 The project sponsor must submit to the Department a verified estimate of current carbon stocks within the offset project boundary within one year of the discovery of the unintentional reversal.
 - 10.5.3.8.2 Intentional Reversals. Requirements for intentional reversals are as follows:
 - 10.5.3.8.2.1 If an intentional reversal occurs, the project sponsor shall, within 30 calendar days of the intentional reversal:
 - 10.5.3.8.2.1.1 Provide notice, in writing, to Department of the intentional reversal; and
 - 10.5.3.8.2.1.2 Provide a written description and explanation of the intentional reversal to the Department.
 - 10.5.3.8.2.2 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.
 - 10.5.3.8.2.3 If an intentional reversal occurs, and CO_2 offset allowances have been awarded to the offset project, to the offset project, the forest owner must transfer to the forest offset retirement account a quantity of CO_2 allowances corresponding to the number of metric tons of CO_2 equivalent reversed within six months of notification by the Department.
 - 10.5.3.8.2.3.1 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.
 - 10.5.3.8.2.3.2 If the forest owner does not surrender valid CO_2 allowances to the Department within six months of notification by the Department, the Forest owner will be subject to enforcement action and each CO_2 equivalent ton of carbon sequestration reversed will constitute a separate violation and applicable state law.
 - 10.5.3.8.3 Project Termination. Requirements for project termination are as follows:
 - 10.5.3.8.3.1 The project sponsor must surrender to the Department or its agent for retirement a quantity of CO_2 Allowances in the amount calculated pursuant to project termination provisions in the forest offset protocol within six months of project termination.
 - 10.5.3.8.3.2 If the project sponsor does not surrender to the Department or its agent a quantity of CO_2 Allowances in the amount calculated pursuant to project termination provisions in the forest offset protocol within 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 section and applicable state law.

- 10.5.3.8.4 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.
- 10.5.3.9 Timing of forest offset projects. The Department may award CO₂ offset allowances under subsection 10.7 only for forest offset projects that are initially commenced on or after January 1, 2014.
- 10.5.3.10 Projects that Have Been Awarded Credits by a Voluntary Greenhouse Gas Reduction Program. The provisions of subsections 10.3.3.4 and 10.4.3.2 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 subsection 10.5.3, without regard to quantity of credits that were awarded to the project under the voluntary program.
 - 10.5.3.10.1 The project satisfies all other general requirements of Section 10.0, including all specific requirements of subsection 10.5.3, 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 subsection 10.7.
 - 10.5.3.10.2 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 subsection 10.7. Forest offset data reports and monitoring and verification reports must meet all requirements of subsections 10.5.3.5 and 10.5.3.6.
 - 10.5.3.10.3 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.
 - 10.5.3.10.3.1 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.
 - 10.5.3.10.3.2 The project sponsor or voluntary greenhouse gas program has canceled or retired all credits that were awarded for carbon sequestration that occurred during the time periods for which the project intends to be awarded CO_2 offset allowances pursuant to subsection 10.7, and such credits were canceled or required for the sole purpose of allowing the project to be awarded CO_2 offset allowances pursuant to subsection 10.7.
- 10.5.4 RESERVED
- 10.5.5 Avoided methane emissions from agricultural manure management operations. To qualify for the award of CO₂ offset allowances under Section 10.0, offset projects that capture and destroy methane from animal manure and organic food waste using anaerobic digesters shall meet the requirements of subsection 10.5.5 and all other applicable requirements of Section 10.0.
 - 10.5.5.1 *Eligibility*.
 - 10.5.5.1.1 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.
 - 10.5.5.1.2 Eligible offset projects shall employ only manure-based anaerobic digester systems using livestock manure as the majority of digester feedstock, defined as more than 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.
 - 10.5.5.1.3 The provisions of subsections 10.3.4.2 and 10.3.4.3 shall not apply to agricultural manure management offset projects provided either of the following requirements are met.

10.5.5.1.3.1 The offset project is located in a state that has a market penetration rate (MP (%)) for anaerobic digester projects of 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 subsection 10.4 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 subsection 10.4.

 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 subsection 10.4.

- 10.5.5.1.3.2 The offset 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.
- 10.5.5.2 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 subsection 10.5.5.1. The offset project narrative shall include the following information.
 - 10.5.5.2.1 Owner and operator of the offset project;
 - 10.5.5.2.2 Location and specifications of the facility where the offset project will occur;
 - 10.5.5.2.3 Owner and operator of the facility where the offset project will occur;
 - 10.5.5.2.4 Specifications of the equipment to be installed and a technical schematic of the offset project; and
 - 10.5.5.2.5 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.
- 10.5.5.3 *Emissions baseline determination.* The emissions baseline shall represent the potential emissions of the CH₄ that would have been produced in a baseline scenario under uncontrolled anaerobic storage conditions and released directly to the atmosphere in the absence of the offset project.
 - 10.5.5.3.1 Baseline CH₄ emissions shall be calculated as follows:

 $E_{b} = (V_{m} \times M)/2000 \times GWP$

Where:

 E_b = Potential CO₂e emissions due to calculated CH₄ production under site-specific anaerobic storage and weather conditions (tons);

 V_m = Volume of CH₄ produced each month from decomposition of volatile solids in a baseline uncontrolled anaerobic storage scenario under site-specific storage and weather conditions for the facility at which the manure or organic food waste is generated (ft³)

M = Mass of CH₄ per cubic foot (0.04246 lb/ft³ default value at one atmosphere and 20°C) OMD = Ole halve prime protectial of OLL (20)

GWP = Global warming potential of CH_4 (28)

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10.5.5.3.2 The estimated amount of volatile solids decomposed (VS_{dec}) each month under the uncontrolled anaerobic storage baseline scenario (kg) shall be calculated as follows:

Where:

VS = volatile solids as determined from the equation:

 $VS = M_m x TS_\% x VS_\%$

where:

M_m = mass of manure or organic food waste produced per month (kg)

 $TS_{\%}$ = concentration (percent) of total solids in manure or organic food waste as determined through I-3750, "Solids, residue on evaporation at 105 degrees C, total, gravimetric," 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. Edited by Marvin J. Fishman and Linda C. Friedman.

 $VS_{\%}$ = concentration (percent) of volatile solids in total solids as determined through EPA 160.4 testing method (U.S.EPA Method Number 160.4, Methods for the Chemical Analysis of Water and Wastes (MCAWW) (EPA/600/4-79/020))

 VS_{avail} = volatile solids available for decomposition in manure or organic food waste storage each month as determined from the equation:

$$VS_{avail} = VS_p + \frac{1}{2}VS_{in} - VS_{out}$$

Where:

 VS_p = volatile solids present in manure or organic food waste storage at beginning of month (left over from previous month) (kg)

 VS_{in} = volatile solids added to manure or organic food waste storage during the course of the month (kg). The factor of ½ is multiplied by this number to represent the average mass of volatile solids available for decomposition for the entire duration of the month.

VS_{out} = volatile solids removed from the manure or organic food waste storage for land application or export (assumed value based on standard farm practice)

f = van't Hoff-Arrhenius factor for the specific month as determined using the equation below. Using a base temperature of 30° C, the equation is as follows:

$$f = exp\{[E(T_2 - T_1)]/[(GC \times T_1 \times T_2)]\}$$

Where:

f = conversion efficiency of VS to CH_4 per month

E = activation energy constant (15,175 cal/mol)

 T_2 = average monthly ambient temperature for facility where manure or organic food waste is generated (converted from ^o Celsius to ^o Kelvin) as determined from the nearest National Weather Service certified weather station (if reported temperature ^o C > 5^o C; if reported temperature ^oC < 5^o C, then F = 0.104)

 $T_1 = 303.15 (30^{\circ} \text{ C converted to }^{\circ}\text{K})$

GC = ideal gas constant (1.987 cal/K mol)

10.5.5.3.3 The volume of CH_4 produced (ft³) from decomposition of volatile solids shall be calculated as follows:

 $V_{m} = (VS_{dec} \times B_{o}) \times 35.3147$

Where:

 V_m = volume of CH₄ (ft³)

 VS_{dec} = volatile solids decomposed (kg)

 B_o = manure or organic food waste type-specific maximum methane generation constant (m³ CH₄/kg VS decomposed). For dairy cow manure, $B_o = 0.24$ m³ CH₄/kg VS decomposed. The methane generation constant for other types of manure shall be those cited at U.S. EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2010, Annex 3.10, Table 180 (U.S. Environmental Protection Agency, February 2017), unless the project sponsor proposes an alternate methane generation constant and that alternate is approved by the Department. If the project sponsor proposes to use a methane generation constant other than the ones found in the above-cited reference, the project sponsor must provide justification and documentation to the Department.

 $ER_t = E_b - E_p$

where:

ER_t = CO₂e emissions reductions due to project activities (tons);

 E_b = Potential CO₂e emissions due to calculated CH₄ production under site-specific anaerobic storage and weather conditions (tons);

 $E_p = CO_2 e$ emissions due to project activities additional to baseline (tons), including, but not limited to, manure transportation, flaring, venting, and effluent management.

Emissions reductions may not exceed the potential emissions of the anaerobic digester, as represented by the annual volume of CH4 produced by the anaerobic digester, as monitored pursuant to subsection 10.5.5.5. If the project is a regional-type digester, CO2 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 subsections 10.5.5.3.1 through 10.5.5.3.3. Transport CO2 emissions shall be determined through one of the following methods.

- 10.5.5.4.1 Documentation of transport 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. Off-site is defined as a location that is not contiguous with the property where the anaerobic digester is located. 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.
 - 10.5.5.4.1.1 Diesel fuel: 22.912 lbs. CO₂/gallon.
 - 10.5.5.4.1.2 Gasoline: 19.878 lbs. CO₂/gallon.
 - 10.5.5.4.1.3 Other fuel: submitted emissions factor approved by the Department.
- 10.5.5.4.2 Documentation of total tons of manure and organic food waste transported from off-site for input into the anaerobic digester during each reporting year, as monitored pursuant to subsection 10.5.5.5.1, and a log of transport miles and fuel type used 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.
 - 10.5.5.4.2.1 Diesel fuel: 0.131 lbs. CO_2 per ton-mile.
 - 10.5.5.4.2.2 Gasoline: 0.133 lbs. CO₂ per ton-mile.
 - 10.5.5.4.2.3 Other fuel: submitted emissions factor approved by the Department.
- 10.5.5.5 *Monitoring and verification requirements.* Offset projects shall employ a system that provides metering of biogas volumetric flow rate and determination of CH_4 concentration. Annual monitoring and verification reports shall include monthly biogas volumetric flow rate and CH_4 concentration determination. Monitoring and verification shall also meet the following requirements.
 - 10.5.5.5.1 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 and organic food waste (kg) being digested and percentage of volatile solids present before digestion, consistent with the requirements at subsections 10.5.5.3 and 10.5.5.5.3, and apportioned accordingly among sources. The project sponsor shall provide supporting material and receipts tracking the monthly receipt of manure and organic food waste (kg) used to supply the anaerobic digester from each supplier.
 - 10.5.5.5.2 If the offset project includes the digestion of organic food waste eligible pursuant to subsection 10.5.5.1.2, organic food waste shall be sampled monthly to determine the amount of volatile solids present before digestion, consistent with the requirements at subsections 10.5.5.3 and 10.5.5.3, and apportioned accordingly.
 - 10.5.5.5.3 The project sponsor shall submit a monitoring and verification plan as 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 CH_4 composition. The monitoring and verification plan shall be specified in accordance with the applicable monitoring requirements listed in Table 8. 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 subsection 10.6.

Table 8.	Monitoring	Requirements
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Parameter	Measurement Unit	Frequency of Sampling	Sampling Method(s)
Influent flow (mass) into the digester	Kilograms (kg) per month (wet mass)	Monthly total into the digester	 a) Recorded mass 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	U.S. EPA Method Number 160.3, Methods for the Chemical Analysis of Water and Wastes (MCAWW) (EPA/600/4-79/020)
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 ^o C	Monthly (based on farm averages)	Closest National Weather Service-certified weather station
Volume of biogas produced by digester	Standard cubic feet (scf)	Continuous, totalized monthly	Flow meter
Methane composition of biogas produced by digester	Percent (of sample)	Quarterly	Bag sampling and third party laboratory analysis using applicable U.S. EPA test methods

10.6 Accreditation of independent verifiers

- 10.6.1 *Standards for accreditation*. Independent verifiers may be accredited by the Department to provide verification services as required of project sponsors under this Regulation, provided that independent verifiers meet all of the requirements.
 - 10.6.1.1 *Verifier minimum requirements.* Each accredited independent verifier shall demonstrate knowledge of the following topics:
 - 10.6.1.1.1 Utilizing engineering principles;
 - 10.6.1.1.2 Quantifying greenhouse gas emissions;
 - 10.6.1.1.3 Developing and evaluating air emissions inventories:
 - 10.6.1.1.4 Auditing and accounting principles;
 - 10.6.1.1.5 Knowledge of information management systems;
 - 10.6.1.1.6 Knowledge of the requirements and other applicable requirements; and
 - 10.6.1.1.7 Such other qualifications as may be required by the Department to provide competent verification services as required for individual offset categories specified at subsection 10.5.
 - 10.6.1.2 *Organizational qualifications*. Accredited independent verifiers shall demonstrate that they meet the following requirements:

- 10.6.1.2.1 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;
- 10.6.1.2.2 verifiers shall employ staff with professional licenses, knowledge, and experience appropriate to the specific category(ies) of offset projects at subsection 10.5 that they seek to verify;
- 10.6.1.2.3 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
- 10.6.1.2.4 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 subsection 10.4.5, and remedy any such conflicts of interest prior to providing verification services.
- 10.6.1.3 *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.
- 10.6.2 *Application for accreditation*. An application for accreditation shall not contain any proprietary information, and shall include the following:
 - 10.6.2.1 The applicant's name, address, e-mail address, telephone number, and facsimile transmission number;
 - 10.6.2.1.1 Documentation that the applicant has at least two years of experience in each of the knowledge areas specified at subsections 10.6.1.1.1 through 10.6.1.1.5, and as may be required pursuant to subsection 10.6.1.1.7;
 - 10.6.2.1.2 Documentation that the applicant has successfully completed the requirements at subsection 10.6.1.3 as applicable;
 - 10.6.2.1.3 A sample of at least one work product that provides supporting evidence that the applicant meets the requirements at subsections 10.6.1.1 and 10.6.1.2. 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;
 - 10.6.2.1.4 Documentation that the applicant holds professional liability insurance as required pursuant to subsection 10.6.1.2.3.
 - 10.6.2.1.5 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 subsection 10.6.1.2.4.
- 10.6.3 Department action on applications for accreditation. The Department shall approve or deny a complete application for accreditation within 45 days after submission. Upon approval of an application for accreditation, the independent verifier shall be accredited for a period of three years from the date of application approval.
- 10.6.4 *Reciprocity*. Independent verifiers accredited in other participating states may be deemed to be accredited in the State of Delaware, at the discretion of the Department.
- 10.6.5 Conduct of accredited verifiers.
 - 10.6.5.1 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.
 - 10.6.5.2 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.

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- 10.6.5.3 The Department may reject a verification report and certification statement from an accredited verifier, submitted as part of a consistency application required pursuant to subsection 10.4.2 or submitted as part of a monitoring and verification report submitted pursuant to subsection 10.7.2, if the Department determines that the accredited verifier has a conflict of interest related to the offset project, offset project developer, or project sponsor.
- 10.6.5.4 The Department may revoke the accreditation of a verifier at any time given cause, for the following:
 - 10.6.5.4.1 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;
 - 10.6.5.4.2 The verifier is no longer qualified due to changes in staffing or other criteria;
 - 10.6.5.4.3 Negligence or neglect of responsibilities pursuant to the requirements; and
 - 10.6.5.4.4 Intentional misrepresentation of data or other intentional fraud.
- 10.7 Award and Recordation of CO₂ offset allowances.
 - 10.7.1 Quantities of CO₂ offset allowances awarded, and subsequently recorded.
 - 10.7.1.1 Award of CO₂ offset allowances.
 - 10.7.1.1.1 CO_2 emissions offset projects. Following the issuance of a consistency determination under subsection 10.4.5.2 and the approval of a monitoring and verification report under the provisions of subsection 10.7.5, the Department will award one CO_2 offset allowance for each ton of demonstrated reduction in CO_2 or CO_2 equivalent emissions or sequestration of CO_2 .
 - 10.7.1.2 Recordation of CO₂ offset allowances. After CO₂ offset allowances are awarded under subsection 10.7.1.1, the Department shall record such CO₂ offset allowances in the project sponsor's general account.
 - 10.7.2 Deadlines for submittal of monitoring and verification reports.
 - 10.7.2.1 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 by June 30, 2009.
 - 10.7.2.2 For CO_2 emissions offset projects undertaken on or after January 1, 2009, the monitoring and verification report must be submitted within 6 months following the completion of the last calendar year during which the offset project achieved CO_2 equivalent reductions or sequestration of CO_2 for which the project sponsor seeks the award of CO_2 offset allowances.
 - 10.7.3 *Contents of monitoring and verification reports.* For an offset project, the monitoring and verification report must include the following information.
 - 10.7.3.1 The project's sponsor's name, address, e-mail address, telephone number, facsimile transmission number, and account number.
 - 10.7.3.2 The CO₂ emissions reduction or CO₂ sequestration determination as required by the relevant provisions of subsection 10.5 of this regulation, including a demonstration that the project sponsor complied with the required quantification, monitoring, and verification procedures under subsection 10.5, as well as those outlined in the consistency application approved pursuant to subsection 10.4.5.2.
 - 10.7.3.3 A signed statement 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 the CO_2 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 CO_2 offset allowances under the CO_2 Budget Trading Program is contingent on meeting the requirements of the CO_2 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 Delaware."

- 10.7.3.4 A certification signed by the offset project sponsor certifying that all offset projects for which the sponsor has received offset allowances under this Regulation (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.
- 10.7.3.5 A verification report and certification statement signed by an independent verifier accredited pursuant to subsection 10.6 that documents that the independent verifier has reviewed the monitoring and verification report and evaluated the following in relation to the applicable requirements of subsection 10.5, and any applicable guidance issued by the Department.
 - 10.7.3.5.1 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 subsection 10.5.
 - 10.7.3.5.2 The adequacy and consistency of methods used to quantify, monitor, and verify CO_2 emissions reductions and CO_2 sequestration in accordance with the applicable requirements of subsection 10.5 of this regulation and as outlined in the consistency application approved pursuant to subsection 10.4.5.2.
 - 10.7.3.5.3 Such other evaluations and verification reviews as may be required by the Department. The adequacy and validity of information supplied by the project sponsor to demonstrate that the offset project meets the applicable eligibility requirements of subsection 10.5.
- 10.7.3.6 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.
- 10.7.3.7 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.
- 10.7.4 Prohibition against filing monitoring and verification reports in more than one participating state. Monitoring and verification reports may only be filed under subsection 10.7 for projects that have received consistency determinations under subsection 10.4.5.2 Monitoring and Verification reports may not be filed under subsection 10.7 for projects that have received consistency determinations in other participating states.
- 10.7.5 Department action on monitoring and verification reports. The Department will approve or deny a complete monitoring and verification report, in a format approved by the Department, filed with the Department pursuant to subsection 10.7.4, within 45 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 subsection 10.7.
- 17 DE Reg. 644 (12/01/13)

22 DE Reg. 511 (12/01/18)

12/11/18

11.0 CO₂ Emissions Auction

11.1 Purpose

The purpose of this section is to provide for the administration and implementation by the Department of CO_2 Allowance Auctions and programs to promote the purposes of the CO_2 Budget Trading Program.

- 11.2 RESERVED
- 11.3 Multi-State Auctions

- 11.3.1 The Department shall participate in a multi-state CO₂ Allowance Auction or Auctions if the Department determines, in consultation the Delaware Public Service Commission that:
 - 11.3.1.1 A multi-state auction capability and process is in place for the Participating States;
 - 11.3.1.2 The multi-state auction can provide benefits that meet or exceed the objectives of the auction and purposes of the Account, as described in this Regulation, and;
 - 11.3.1.3 The multi-state auction process would be consistent with the process described in this regulation.
- 11.3.2 Should the Department, in consultation with the Public Service Commission, find that these conditions have not been satisfied, the Department may conduct a Delaware State auction or auctions pursuant to this regulation or may take such other action as the Secretary deems appropriate.
- 11.3.3 Proceeds associated with the sale of all of State of Delaware's CO₂ Allowances, whether sold in a multistate or a Delaware State CO₂ Allowance Auction shall be generated and appropriated as provided for in 7 Del C Chapter IIA Regional Greenhouse Gas Initiative and CO2 Emission Trading Program.
- 11.4 Implementation of CO₂ Allowance Auctions
 - 11.4.1 The Department may design, implement and administer CO₂ Allowance Auctions in the event a regional auction is not held or does not meet the needs of the Department or this regulation. The Department shall make every effort to participate in a regional auction if at all possible.
 - 11.4.2 Implementation and administrative support functions for any auction conducted pursuant to this Regulation and with respect to the administration of the Account may be delegated by the Department to a contractor deemed qualified by the Department to perform such functions, provided that such designee shall perform all such functions under the direction and oversight of the Department.
- 11.5 Commencement, Frequency and Quantity of CO₂ Allowance Auctions
 - 11.5.1 **Commencement**: The Department or its agent shall participate in or conduct CO₂ Allowance Auctions to sell such allowances pursuant to this regulation. The initial auction shall be conducted at such time and manner as determined by the Department in consultation with the Delaware Public Service Commission.
 - 11.5.2 **Frequency:** CO₂ Allowance Auctions will be held as often as practical and necessary to effectuate the objectives of the CO₂ Program.
 - 11.5.3 **Calendar:** The Department or its agent shall maintain a calendar of anticipated auction dates on its Website. The calendar shall indicate the auction format and the number of allowances and allocation years of allowances to be auctioned at each auction. The Department or its agent may periodically revise the calendar, provided that the information relevant to the next scheduled CO₂ Allowance Auction shall be fixed no later than 45 calendar days prior to such auction. The calendar shall include the dates of at least the next four (4) CO₂ Allowance Auctions and may also include the anticipated number of allowances to be auctioned at each Auction. The Department or its agent may periodically modify the anticipated dates of Auctions listed on such calendar.
 - 11.5.4 **Quantity**: Prior to the end of each Control Period, CO₂ Allowances for such Control Period will be made available for sale. CO₂ Allowances will be made available for sale by allocation year. Up to 50% of the allowances from an allocation year may be made available for sale in advance of the respective allocation year; such allowances may be made available for sale up to four (4) years in advance of such allocation year. Specific quantities of CO₂ Allowances that will be offered for sale will be included in each Notice of CO₂ Allowance Auction.
 - 11.5.5 **Lot Sizes**: The Department shall make CO₂ Allowances available for sale in lot sizes of 1,000 allowances, except where available supply requires a smaller lot size.
 - 11.5.6 **Reserve Price**: In administering Auctions, the Department may employ the use of a Reserve Price and the Department shall publish or announce such reserve price prior to each CO₂ Allowance Auction.
 - 11.5.7 **Unsold Allowances**: Unsold CO₂ Allowances may be made available for sale in subsequent auctions or after consultation with the Public Service Commission.
- 11.6 Action Format

The initial auction shall be conducted as a Single Round Sealed-Bid Uniform Price Auction. The Department, in consultation with the Delaware Public Service Commission, may employ a Single Round Sealed-Bid Uniform Price Auction or an Ascending Price, Multiple Round Auction in subsequent auctions or such other auction design as determined by the Department.

- 11.7 Participant Eligibility and Limitations
 - 11.7.1 The owners or operators of CO₂ Budget Units located in the State of Delaware shall be eligible to participate in all auctions.
 - 11.7.2 Categories of bidders that may be eligible to participate in auctions include but are not limited to:
 - 11.7.2.1 Owners or operators of CO₂ Budget Units within a Participating State
 - 11.7.2.2 Owners or operators of a generation source located outside of the Participating States,
 - 11.7.2.3 Brokers,
 - 11.7.2.4 Environmental groups,
 - 11.7.2.5 Financial and investment institutions, and
 - 11.7.2.6 Other market participants.
 - 11.7.3 The Department, in consultation with the Delaware Public Service Commission, may preclude or limit the participation of any one or all of the categories of bidders. Notification of eligible categories of bidders will be included in each Notice of CO₂ Allowance Auction.
 - 11.7.4 Any party wishing to participate in a CO_2 Allowance Auction will be required to open and maintain a compliance or general account pursuant to the provisions in Section 6.0.
 - 11.7.5 Limitations: Participation in any auction may be limited to the level of financial security provided.
 - 11.7.6 The Department may institute a purchasing and/or bidding limitation in each auction. In no instance shall this limitation be greater than 25% of the allowances available in an auction not including the CCR. Any such limitations shall be included in the Notice of CO2 Allowance Auction.
 - 11.7.7 Any applicant or bidder that has been found to have violated any rule, regulation, or law associated with any commodity market or exchange may be denied eligibility or precluded from participation in CO₂ Allowance Auctions.
- 11.8 Participation Requirements
 - 11.8.1 **Qualification**: Any party wishing to participate in a CO₂ Allowance Auction or Auctions shall submit an application for qualification in the form and manner provided in the Notice of CO₂ Allowance Auction to the Department or its agent on or before the application deadline date specified in the Notice of CO₂ Allowance Auction. As a part of their application, applicants will be required to provide information and documentation relating to their ability and authority to execute bids and honor contractual obligations. Such documentation may include but may not be limited to:
 - 11.8.1.1 Information and documentation regarding the corporate identity, ownership, affiliations, and capital structure of the applicant;
 - 11.8.1.2 Declarations as to the beneficial ownership of any allowance that may be acquired through the auction;
 - 11.8.1.3 The identification of any indictment or felony conviction of any member, director, principle, partner or officer of the applicant or any affiliate or related entity;
 - 11.8.1.4 The identification of any previous or pending investigation with respect to any alleged violation of any rule, regulation, or law associated with any commodity market or exchange.
 - 11.8.1.5 Evidence demonstrating that such applicant has opened a general or compliance account as provided for in the provisions in Section 6.0 and identification of relationships with any other account holder.
 - 11.8.1.6 Applicants may be denied qualification based on the information provided or upon information as to such applicant obtained independent of the application process.
 - 11.8.2 The Department or its agent will review each application for qualification and make determinations as to qualification to participate or otherwise submit bids in CO₂ Allowance Auctions. Failure to provide any information required by the Notice of CO₂ Allowance Auction may result in the application being declared incomplete or otherwise deficient. If an application for qualification is determined to be incomplete or otherwise deficient, the Department or its agent shall notify the Applicant and state the reason therefore. The Department may offer an opportunity for the applicant to remedy their application by the deadline pursuant to the Auction Notice. Qualified applicants will be notified by the Department or its agent pursuant to the Auction Notice.

- 11.8.3 Parties found qualified for participation under subsection 11.8.2 will be qualified for subsequent CO_2 Allowance Auctions, and will be qualified to participate in such auctions within the financial security limitations of subsection 11.8.8; provided that there has been no material change to the information provided in the application, that the party is within one of the categories of eligible bidders described in the Notice of CO_2 Allowance Auction for such auction, and such party meets all other requirements for participation. Any party found qualified shall notify the Department of any material change in the information provided in the application for qualification by the date on which qualification applications for the next auction are due. Such notification shall state the date the change occurred and describe the change in sufficient detail to enable the Department or its agent to determine if a change in the qualification status to participate in future auctions is warranted.
- 11.8.4 The Department may require parties previously found qualified to up-date and re-file applications for qualification on an annual basis or as requested by the Department.
- 11.8.5 The Department may suspend or revoke previously granted qualification of any party if such party fails to comply with this section and/or the provisions.
- 11.8.6 Bid Submittal Instructions. All bids shall be in a form prescribed by the Department, which shall be made available electronically on the CO₂ Allowance Auction Website, as appropriate. All bids submitted will be considered binding offers for the purchase of allowances under the rules of the auction, and this regulation.
- 11.8.7 If the Department determines that a bidder has provided false or misleading information, or has withheld pertinent information in its application, or has otherwise failed to comply with any material provision or has violated any part of the auctions rules, the bidder may be prohibited from participating in any future CO₂ Allowance Auctions.
- 11.8.8 To receive approval to participate in any specific auction, otherwise qualified bidders will be required to provide financial security in the form of a bond, cash, certified funds, or an irrevocable stand-by letter of credit, in a form acceptable to the Department. Financial security shall be provided in a form and manner as described in the Notice of CO₂ Allowance Auction.
 - 11.8.8.1 Parties who have posted financial security may request return of their financial security at any time prior to or following any CO₂ Allowance Auction, and the Department shall return said financial security provided that the Department has no current or pending claim to such security as a result of a failure of the party to comply with these regulations or to pay the full amount of its accepted bid when due.
 - 11.8.8.2 Financial security may be forfeited to and retained by the Department or its agent in the event the bidder's offer is accepted in a CO₂ Allowance Auction and the bidder fails to tender payment of the full amount when due.
- 11.9 Notice of Auctions
 - 11.9.1 A Notice of CO_2 Allowance Auction ("Notice") shall be published on the CO_2 Allowance Auction Website no later than 45 days prior to the date upon which each auction may be conducted. Such Notices may be transmitted electronically to parties requesting such notification provided they have submitted an electronic-mail address to the Department or its agent.
 - 11.9.2 Each Notice will provide a specific description of all auction participation requirements, and shall include but not be limited to information including the date, time and location of the CO₂ Allowance Auction, the categories of bidders who will be eligible to bid, the quantity of CO₂ Allowances to be auctioned, the auction format, amount and type of security required, any participation limitations, information regarding settling and clearing of allowance payments, instructions as to qualification applications, a standard allowance purchase and sale contract, other pertinent rules of the auction, and provide a point of contact for further information.
- 11.10 Auction Reporting and Transfer of CO₂ Allowances

An independent monitor such as a certified public accounting firm or similar entity shall observe the conduct and outcome of each auction and issue a report to the Department or its agent in accordance with professional auditing standards addressing whether the auction was conducted in accordance with the rules and procedures in the respective Notice of CO_2 Allowance Auction. Upon receipt and approval by the Department of the report and upon payment in full by successful bidders, the Department shall transfer or have transferred the corresponding CO_2 Allowances to each successful bidder's applicable compliance or general account.

11.11 Auction and Secondary Market Monitoring

- 11.11.1 In advising the Department or its agent, the professional independent auction monitor will monitor each CO₂ Allowance Auction and develop and apply data collection methods, metrics, and analytic techniques, and thresholds for identifying any bidding behavior or activity that may have a significant impact on the efficiency and performance of such auctions, including, but not limited to:
 - 11.11.1.1 Collusion,
 - 11.11.1.2 Market power, and/or
 - 11.11.1.3 Price manipulation.
- 11.11.2 The independent auction monitor shall also monitor allowance market data and information known to the Department including allowance transactions and associated pricing reported in the CO₂ Allowance Tracking System, and other relevant data and information to ensure fair competition, efficient pricing, and protection against collusive or manipulative behavior in the CO₂ Allowance Auctions and the CO₂ Budget Trading Program.
- 11.12 Antideceptive Practices.

It is unlawful for a bidder to use or employ any manipulative, misleading, or deceptive practice in connection with its prequalification application or purchase of allowances from the Department, including but not limited to any practice that is in contravention of any applicable federal or state law or regulation.

11.13 Publication of Results

Within 10 days of the Transfer of CO_2 Allowances provided for under subsection 11.10, the Department or its agent shall publish on its website the auction clearing price and the total amount of Allowances sold in such Auction.

- 12 DE Reg. 674 (11/01/08)
- 17 DE Reg. 644 (12/01/13)
- 22 DE Reg. 511 (12/01/18)