CHAPTER 27C

CO_2 BUDGET TRADING PROGRAM

Authority

N.J.S.A. 13:1B-3(e), 13:1D-9 and 26:2C-1 et seq., particularly 26:2C-45 et seq.

Source and Effective Date

R.2008 d.338, effective November 17, 2008 (operative December 9, 2008).
See: 40 N.J.R. 3792(a), 40 N.J.R. 6541(b).

Chapter Expiration Date

In accordance with N.J.S.A. 52:14B-5.1b, Chapter 27C, CO_2 Budget Trading Program, expires on November 17, 2015. See: 43 N.J.R. 1203(a).

Chapter Historical Note

Chapter 27C, CO_2 Budget Trading Program, was adopted as new rules by R.2008 d.338, effective November 17, 2008 (operative December 9, 2008). See: Source and Effective Date.

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SUBCHAPTER 1. GENERAL PROVISIONS

7:27C-1.1 Purpose

This chapter establishes the New Jersey 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.

7:27C-1.2 Definitions

The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise.

"Account number" means the identification number given by the Department to each CO_2 Allowance Tracking System account.

"Acid rain emissions limitation" means acid rain emissions limitation, as that term is defined by the EPA at 40 CFR 72.2, incorporated by reference herein.

"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 Clean Air Act, U.S.C. §§7651 et seq., and 40 CFR Parts 72 through 78.

"Administrator" means the Administrator of the EPA or the Administrator's authorized representative.

"Air contaminant" means any substance, other than water or distillates of air, present in the atmosphere as solid particles, liquid particles, vapors or gases.

"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 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 N.J.A.C. 7:27C-5 and 10. The allocation year of each CO_2 allowance is reflected in the unique identification number given to the allowance pursuant to N.J.A.C. 7:27C-6.8(b) or (c).

"Alternate 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 N.J.A.C. 7:27C-2, 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 N.J.A.C. 7:27C-6, to transfer or otherwise dispose of CO_2 allowances held in the general account.

"AP-42" means the January 1995, 5th edition of the manual entitled "Compilation of Air Pollutant Emission Factors," which is published by the EPA, including supplements A through G and any subsequent revisions, as amended and supplemented, incorporated herein by reference. The manual may be obtained from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia, 22161, (703) 487-4650; or from the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402, (202) 783-3228. In addition, the manual can be accessed electronically through the EPA Technology Transfer Network CHIEF site at http://www.epa.gov/ttn/chief/ap42/index.html.

"Ascending price, multiple-round auction" means a multiple-round auction that starts with an opening price, which increases each round by predetermined increments. In each round, a bidder offers the quantity of CO_2 allowances the bidder is willing to purchase at the posted price. Rounds continue so long as demand exceeds the quantity of CO_2 allowances offered for sale. At the completion of the final round, CO_2 allowances may be awarded to remaining bidders at the final price or according to an alternative mechanism.

"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 a credit that 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 N.J.A.C. 7:27C-8, 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 N.J.A.C. 7:27C-8.

"Award" 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 for early reduction CO_2 allowances pursuant to N.J.A.C. 7:27C-5.2(q), or 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 N.J.A.C. 7:27C-10.11. An award is a type of allocation.

"Beneficial interest" means profit, benefit, or advantage resulting from the ownership of a CO_2 allowance.

"Bidder" means a qualified party that has met the requirements of N.J.A.C. 7:27C-5.10 through 5.13 and has received approval from the Department to participate in a specified CO_2 allowance auction pursuant to N.J.A.C. 7:27C-5.13(b).

"Billing meter" means the device used to measure electric or thermal output for commercial billing under a contract between the owner or owners of the facility selling the electric or thermal output and the owner or owners of the entity purchasing the electric or thermal output, where no owner of either the seller or the buyer also is an owner of the other party.

"Boiler" means an enclosed fossil or other fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

"Bottoming-cycle cogeneration unit" means a cogeneration unit in which the energy input to the unit is first used to produce useful thermal energy and at least some of the reject heat from the useful thermal energy application or process is then used for electricity production.

"British thermal unit" or "Btu" means the quantity of heat required to raise the temperature of one pound of water one degree Fahrenheit, at the temperature at which water has its greatest density (approximately 39 degrees Fahrenheit).

"CAIR NO_X Annual Trading Program" means a multi-state nitrogen oxides air pollution control and emission reduction program approved and administered by the Administrator in accordance with 40 CFR Part 96 subparts AA through II and 40 CFR 51.123(o)(1) or (2) or established by the Administrator in accordance with subparts AA through II of 40 CFR Part 97 and 40 CFR 51.123(p) and 52.35, as a means of mitigating interstate transport of fine particulates and nitrogen oxides.

"CAIR NO_X Ozone Season Trading Program" means a multi-state nitrogen oxides air pollution control and emission reduction program approved and administered by the Administrator in accordance with subparts AAAA through IIII of 40 CFR Part 96 and 40 CFR 51.123(aa)(1) or (2) (and (bb)(1)), (bb)(2), or (dd) or established by the Administrator in accordance with subparts AAAA through IIII of 40 CFR Part 97 and 40 CFR 51.123(ee) and 52.35, as a means of mitigating interstate transport of ozone and nitrogen oxides.

"CAIR SO_2 Trading Program" means a multi-state sulfur dioxide air pollution control and emission reduction program approved and administered by the Administrator in accordance with subparts AAA through III of 40 CFR Part 96 and 40 CFR 51.124(o)(1) or (2) or established by the Administrator in accordance with subparts AAA through III of 40 CFR Part 97 and 40 CFR 51.124(r) and 52.36, as a means of mitigating interstate transport of fine particulates and sulfur dioxide.

"Certified dispatch agreement facility" means a CO_2 budget source that is eligible to receive a fixed price sale offer of CO_2 allowances from the Department pursuant to N.J.A.C. 7:27C-5.4(c).

"CH_4" means methane.

"CO_2" means carbon dioxide.

"CO_2 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 chapter.

"CO_2 allowance auction" means the sale of CO_2 allowances through competitive bidding as administered in accordance with N.J.A.C. 7:27C-5.5 through 5.18.

"CO_2 allowance auction website" means a website established by the Department that contains information about CO_2 allowance auctions.

"CO_2 allowance deduction" or "deduct CO_2 allowances" means the permanent withdrawal of CO_2 allowances by the Department from a 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 N.J.A.C. 7:27C-8, or for the forfeit or retirement of CO_2 allowances as provided by this chapter.

"CO_2 allowance price" means the price for CO_2 allowances in the CO_2 Budget Trading Program for a particular time period as determined by the Department, calculated based on a volume-weighted average of transaction prices reported to the Department, 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 submitted to the Department for recordation, in accordance with

N.J.A.C. 7:27C-6 and 7, in a CO_2 Allowance Tracking System account.

"CO_2 Allowance Tracking System" means the system by which the Department 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 offset allowances, 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 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 or, if that March 1 is not a business day, midnight of the first business day thereafter, and also means the deadline by which CO_2 allowances shall be submitted for recordation in a CO_2 budget source's compliance account in order for the source to meet the CO_2 requirements of N.J.A.C. 7:27C-1.4 for the control period immediately preceding such deadline.

"CO_2 authorized account representative" means:

1. 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 N.J.A.C. 7:27C-2, to represent and legally bind each owner and operator in matters pertaining to the CO_2 Budget Trading Program; or

2. For a general account, the natural person who is authorized, under N.J.A.C. 7:27C-6, to transfer or otherwise dispose of CO_2 allowances held in the general account.

Except in N.J.A.C. 7:27C-2.2, 2.3, 2.4, 2.5, 2.6 and 6.3, whenever the term "CO_2 authorized account representative" is used in this chapter, it includes the alternate CO_2 authorized account representative.

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

"CO_2 budget permit" means the portion of the legally binding permit issued by the Department pursuant to N.J.A.C. 7:27-22 to a CO_2 budget source or CO_2 budget unit that specifies the CO_2 Budget Trading Program requirements applicable to the CO_2 budget source, to each CO_2 budget unit at the CO_2 budget source, and to the owners and operators and the CO_2 authorized account representative of the CO_2 budget source and each CO_2 budget unit.

"CO_2 budget source" means a source that includes one or more CO_2 budget units.

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

"CO_2 budget unit" means a fossil fuel-fired unit that at any time on or after January 1, 2005 served or serves an electricity generator with a nameplate capacity equal to or greater than 25 MWe.

"CO_2 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 N.J.A.C. 7:27C-10.11 and is subject to the relevant compliance deduction limitations of N.J.A.C. 7:27C-6.9(a)3.

"Cogeneration unit" means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine:

1. Having equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy; and

2. Producing electricity during the 12-month period starting on the date the unit first produces electricity, and producing, during any calendar year after the calendar year in which the unit first produces electricity, the following:

i. For a topping-cycle cogeneration unit, useful thermal energy not less than 5.0 percent of total energy output, and:

(1) Useful power that, when added to one-half of useful thermal energy produced, is not less then 42.5 percent of total energy input, if useful thermal energy produced is 15 percent or more of total energy output; or

(2) Useful power that, when added to one-half of useful thermal energy produced, is not less than 45 percent of total energy input, if useful thermal energy produced is less than 15 percent of total energy output;

ii. For a bottoming-cycle cogeneration unit, useful power that is not less than 45 percent of total energy input; and

3. Provided that if the cogeneration unit is a boiler, the total energy input at 2i and ii above is equal to the unit's total energy input from all fuel except biomass.

"Combined cycle system" means a system comprised of one or more of each of the following configured to improve overall efficiency of electricity generation or steam production:

1. Combustion turbine;
2. Heat recovery steam generator; and
3. Steam turbine.

"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 begin 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 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 on the date the unit commences commercial operation, the date the unit becomes a CO_2 budget unit shall be the unit's date of commencement of commercial operation, even if the unit is subsequently modified, reconstructed, or repowered.

"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 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 on the date of commencement of operation, the date the unit becomes a CO_2 budget unit shall be the unit's date of commencement of operation, even if the unit is subsequently modified, reconstructed, or repowered.

"Compliance account" means a CO_2 Allowance Tracking System account, established by the Department for a CO_2 budget source under N.J.A.C. 7:27C-6, 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 for the purpose of meeting the CO_2 requirements of N.J.A.C. 7:27C-1.5.

"Consumer benefit account" means a general account established by the Department from which CO_2 allowances will be sold or auctioned in order to provide moneys to promote energy efficiency; directly mitigate electricity ratepayer impacts attributable to the implementation of the CO_2 Budget Trading Program; develop and deliver renewable or non-carbon-emitting energy technologies; stimulate or reward investment in the development of innovative carbon emissions abatement technologies with significant carbon emissions reduction potential; fund programs that promote measurable end-use energy efficiency improvements in the commercial, institutional, and industrial sectors; support programs that enhance the stewardship and restoration of the State's forests and tidal marshes that provide important opportunities to sequester or reduce greenhouse gases; or fund the administration of greenhouse gas emissions allowance trading programs or consumer benefit programs. Moneys collected through the sale or auction of CO_2 allowances in the consumer benefit account will be deposited in the Global Warming Solutions Fund established by the Department of the Treasury pursuant to N.J.S.A. 26:2C-50 and will be administered in accordance with N.J.S.A. 26:2C-51 and the Department's rules adopted pursuant to N.J.S.A. 26:2C-52.

"Consumer Price Index" or "CPI" means the U.S. Department of Labor, Bureau of Labor Statistics unadjusted Consumer Price Index for All Urban Consumers for the U.S. city average, for All Items on the latest reference base.

"Continuous emissions monitoring system" or "CEMS" means the equipment required under N.J.A.C. 7:27C-8 to sample, analyze, measure, and provide, by means of readings recorded at least once every 15 minutes (using an automated data acquisition and handling system), 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 Part 75 and N.J.A.C. 7:27C-8. The following are examples of the types of continuous emissions monitoring systems that may be used to comply with N.J.A.C. 7:27C-8:

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 (CO_2 or O_2) 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 CO_2 or O_2, 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), incorporated by reference herein, 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 CO_2 pollutant concentration monitor (or an oxygen monitor plus suitable mathematical equations from which the CO_2 concentration is derived) and an automated data acquisition and handling system and providing a permanent, continuous record of CO_2 emissions, in percent CO_2; and

5. An oxygen-monitoring system, consisting of an O_2 concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of O_2, in percent O_2.

"Control area" means an independent system operator or regional transmission organization that includes a participating state in its operating territory.

"Control period" means a three-calendar-year time period, unless extended to four years upon occurrence of a stage-two trigger event. The first control period is January 1, 2009 through December 31, 2011, provided that if a stage-two trigger event occurs during the first control period, then the first control period will be extended by one year, through December 31, 2012. Each subsequent sequential three-calendar-year period is a separate control period that is subject to a single one-year extension upon the occurrence of a stage-two trigger event during the control period. In no event may a control period be longer than four calendar years.

"Current market price" means the volume-weighted average price of CO_2 allowances used in determining the current market reserve price, which is based on the following:

1. CO_2 allowance transaction prices reported to the Department;

2. CO_2 allowance prices as reported publicly through reputable sources;

3. CO_2 allowance award price(s) from previous CO_2 allowance auction(s); or

4. Any combination of 1 through 3 above.

"Current market reserve price" means the monetary amount calculated to be 80 percent of the current market price.

"Descending price, multiple-round auction" means a multiple-round auction that starts with a high provisional price, which falls in each round by predetermined increments. In each round, a bidder can lock in the purchase of some number of CO_2 allowances at the current provisional price and/or wait for the price to fall. Rounds continue so long as the number of CO_2 allowances locked-in is less than the quantity of CO_2 allowances offered for sale.

"Discriminatory price, sealed-bid auction" means a single-round, sealed-bid auction in which a bidder may submit multiple bids for CO_2 allowances at different prices. The price(s) paid by winning bidders with the highest bids for CO_2 allowances is their own bid price(s).

"Dispatch agreement facility" means a CO_2 budget source that meets the criteria at N.J.A.C. 7:27C-5.4(c).

"Distillates of air" means helium (He), nitrogen (N_2), oxygen (O_2), neon (Ne), argon (Ar), krypton (Kr), and xenon (Xe).

"Electronic submission agent" means a natural person to whom the CO_2 authorized account representative or alternate CO_2 authorized account representative has delegated the authority to make an electronic submission to the Department on his or her behalf.

"Eligible biomass" means the following sustainably harvested woody and herbaceous fuel sources, that are available on a renewable or recurring basis (excluding old-growth timber): dedicated energy crops and trees, agricultural food residues 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 based on an evaluation of the environmental sustainability of harvesting practices applicable to the biomass feedstock, taking into consideration pest management, fertilizer and nutrient use, crop rotation practices, water use and pollution management, soil management, and forestry management.

"EPA" means the United States Environmental Protection Agency.

"ERAs" means early reduction CO_2 allowances.

"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.

"Facility code" means a five-digit code assigned by the Energy Information Agency at the United States Department of Energy to power plants that are not owned by electric utilities.

"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 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; and

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 five percent of the annual heat input on a Btu basis during any year.

"General account" means a CO_2 Allowance Tracking System account established by the Department under N.J.A.C. 7:27C-6 for the purpose of holding and transferring CO_2 allowances, which is not a compliance account.

"Global warming potential" or "GWP" means a measure of the radiative efficiency (heat-absorbing ability) of a particular gas relative to that of 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.

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

"Hr" means hour.

"Lb" means pound.

"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 for:

1. The life of the unit;

2. A cumulative term of no less than 25 years, including contracts that permit an election for early termination; or

3. A period equal to or greater than 20 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 settling period" means the first 14 months of any control period.

"Maximum design heat input" means the ability of a unit to combust a stated maximum amount of fuel per hour on a steady state basis, as determined by the physical design and physical characteristics of the unit.

"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 Appendix D of 40 CRF Part 75 is used to report a unit's heat input, this is the value calculated, in accordance with 40 CFR Part 75, using the maximum fuel flow rate and the maximum gross calorific value. If a flow monitor and a diluent gas monitor are used for the unit, this is the value reported, in accordance with 40 CFR Part 75, using the maximum potential flowrate 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 monetary amount of $1.86 in 2008 and 2009, and thereafter means the monetary amount, established as of the first day of each calendar year, as derived through the following formula:

$$MRP(2009+n) = MRP(2009+(n-1)) \times [1+(CPI(2009+(n-1)) - CPI(2009+(n-2))/CPI(2009+(n-2))]$$

where:

MRP = the minimum reserve price

n = the number of years since 2009

"CPI" means, for any calendar year, the 12-month average of the CPI published by the United States Department of Labor, as of the close of the 12-month period ending on August 31 of each calendar year.

"Monitoring system" means any monitoring system that meets the requirements of N.J.A.C. 7:27C-8, including a continuous emissions monitoring system, an excepted monitoring system, or an alternative monitoring system.

"MMBtu" means million Btu.

"MWe" means megawatt electrical.

"MWh" means megawatt hours.

"Nameplate capacity" means the maximum electrical output (in MWe) that a generator can sustain over a specified period of time, under specific conditions designated by the manufacturer, when not restricted by seasonal or other deratings.

"New Jersey CO_2 Budget Trading Program Base Budget" means the annual number of CO_2 tons available in New Jersey for allocation in a given allocation year, in accordance with the CO_2 Budget Trading Program. CO_2 offset allowances awarded to project sponsors and early reduction CO_2 allowances awarded to CO_2 budget sources are separate from and in addition to CO_2 allowances allocated from the New Jersey CO_2 Budget Trading Program Base Budget.

"NYISO" means the New York independent system operator.

"Non-CO_2 budget unit" means a unit that does not meet the definition of "CO_2 budget unit."

"Notice of CO_2 allowance auction" means the notification for a specific auction or auctions issued pursuant to N.J.A.C. 7:27C-5.9.

"O_2" means oxygen.

"Operator" means any person who operates, controls, or supervises a CO_2 budget unit or a CO_2 budget source and includes, but is not limited to, any holding company, utility system, or plant manager of such a unit or source.

"ORIS code" means a four-digit number assigned by the Energy Information Agency at the United States Department of Energy to power plants owned by electric utilities.

"Owner" means any of the following persons:

1. Any holder of any portion of the legal or equitable title in a CO_2 budget unit;

2. Any holder of a leasehold interest in a CO_2 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 CO_2 budget unit;

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 CO_2 allowances held in the general account.

"Participating state" means a state or jurisdiction that has adopted corresponding rules or regulations as part of the CO_2 Budget Trading Program.

"Person" means any individual or entity and shall include, without limitation, corporations, companies, associations, societies, firms, partnerships, and joint stock companies, and shall also include, without limitation, all political subdivisions of this State or any agencies or instrumentalities thereof.

"PJM" means PJM Interconnection, a regional transmission organization.

"Qualified party" means a party that has submitted a qualification application pursuant to N.J.A.C. 7:27C-5.12(a) and that the Department determines to be qualified to participate in CO_2 allowance auctions pursuant to N.J.A.C. 7:27C-5.12(e).

"Receive" or "receipt of" means, when referring to the Department, 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 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 from one CO_2 Allowance Tracking System account to another, for purposes of allocation, transfer, or deduction.

"Reserve price" means the minimum price that the Department will accept for each CO_2 allowance offered for sale in a specific CO_2 allowance auction.

"Retail provider" means a person that provides renewable energy or renewable energy attribute credits to a retail customer through a retail sales transaction, or a person that provides to a retail customer the service of procuring and retiring renewable energy attribute credits on the customer's behalf.

"Serial number" means, when referring to CO_2 allowances, the unique identification number assigned to each CO_2 allowance by the Department under N.J.A.C. 7:27C-6.8(b) and (c).

"Source" means any governmental, institutional, commercial, or industrial structure, installation, plant, building, or facility that emits, or has the potential to emit, any air contaminant.

"Stage-one threshold price" means the monetary amount, established as of the first day of each calendar year, derived annually from use of the following formula:

$$S1TP(2005+n) = S1TP(2005) \times [1+(CPI(2005+(n-1)) - CPI(2005))/CPI(2005)]$$

where:

"S1TP" is the stage-one threshold price;

"S1TP(2005)" is $7.00;

"n" is the number of years since 2005; and

"CPI" means, for any calendar year, the 12-month average of the CPI published by the United States Department of Labor, as of the close of the 12-month period ending on August 31 of each calendar year.

"Stage-one trigger event" means the occurrence of any 12-month period that completely transpires following the market settling period that is characterized by an average CO_2 allowance price equal to or greater than the stage-one threshold price.

"Stage-two threshold price" means the monetary amount, established as of the first day of each calendar year, derived annually from use of the following formula:

$$S2TP(2005+n) = [\ S2TP(2005+(n-1)) \times [[\{CPI(2005+(n-1)) - CPI\ (2005+(n-2))\}/CPI(2005+(n-2))]+0.02] + S2TP(2005+(n-1))$$

where:

"S2TP" is the stage-two threshold price;

"S2TP(2005)" is $10.00; and

"n" is the number of years since 2005.

"CPI" means, for any calendar year, the 12-month average of the CPI published by the United States Department of Labor, as of the close of the 12-month period ending on August 31 of each calendar year.

"Stage-two trigger event" means the occurrence of any 12-month period that completely transpires following the market settling period that is characterized by an average CO_2 allowance price equal to or greater than the stage-two threshold price.

"State" means a state of the United States of America, 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.

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

1. In person;

2. By United States Postal Service; or

3. By other commonly accepted 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.

"Ton" or "tonnage" means a short ton, that is, 2,000 pounds.

"Topping-cycle cogeneration unit" means a cogeneration unit in which the energy input to the unit is first used to produce useful power, including electricity, and at least some of the reject heat from the electricity production is then used to provide useful thermal energy.

"Total energy input" means, with regard to a cogeneration unit, total energy of all forms supplied to the cogeneration unit, excluding energy produced by the cogeneration unit itself, where each form of energy supplied is measured by the lower heating value of that form of energy, calculated as follows:

LHV = HHV–10.55(W + 9H)

where:

LHV = lower heating value of fuel in Btu/lb,

HHV = higher heating value of fuel in Btu/lb,

W = weight, by percent, of moisture in fuel, and

H = weight, by percent, of hydrogen in fuel.

"Total energy output" means, with regard to a cogeneration unit, the sum of useful power and useful thermal energy produced by the cogeneration unit.

"12-month period" means a period of 12 consecutive months determined on a rolling basis where a new 12-month period begins on the first day of each calendar month.

"Uniform-price, sealed-bid auction" means a single-round, sealed-bid auction in which a bidder may submit multiple bids at different prices. The price paid by bidders with winning bids for CO_2 allowances is equal to the price of the highest rejected bid.

"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 allowance" means a CO_2 allowance that has been made available for sale in an auction conducted by the Department, but is not sold in such auction.

"Useful power" means, with regard to a cogeneration unit, electricity or mechanical energy made available for use, excluding any such energy used in the power production process (which process includes, but is not limited to, any on-site processing or treatment of fuel combusted at the unit and any on-site emission controls).

"Useful thermal energy" means with regard to a cogeneration unit, thermal energy that is:

1. Made available to an industrial or commercial process (not a power production process), excluding any heat contained in condensate return or makeup water;

2. Used in a heating application (for example, space heating or domestic hot water heating); or

3. Used in a space cooling application (that is, thermal energy used by an absorption chiller).

"Voluntary renewable energy market account" means an account into which the Department will allocate one percent of the CO_2 allowances for each allocation year from the New Jersey CO_2 Budget Trading Program annual base budget and manage to support the functioning of the voluntary renewable energy market.

"Voluntary renewable energy purchase" means a purchase of electricity from renewable energy generation or a purchase of renewable energy attribute credits, by a retail electricity customer on a voluntary basis. Renewable energy includes electricity generated from biomass, wind, solar thermal, photovoltaic, geothermal, hydroelectric facilities certified by the Low Impact Hydropower Institute, wave and tidal action, and fuel cells powered by renewable fuels. A voluntary renewable energy purchase does not include the purchase of any renewable energy generation or the purchase of any renewable energy attribute credits used by the generator or purchaser to meet any regulatory mandate, such as a renewable portfolio standard.

Administrative correction.
See: 41 N.J.R. 1025(b).

7:27C-1.3 Applicability

(a) The requirements of this chapter apply to any CO_2 budget unit or CO_2 budget source.

(b) Notwithstanding (a) above, a CO_2 budget unit that has a permit containing a condition restricting the supply of the unit's annual electrical output to the electric grid to no more than 10 percent of the annual gross generation of the unit, and which complies with (d) through (i) below, is exempt from the requirements of this chapter, except for the provisions of this section, N.J.A.C. 7:27C-1.6 and N.J.A.C. 7:27C-8.8, and, if applicable because of the award or allocation of CO_2 allowances during the pre-exemption time period, N.J.A.C. 7:27C-5 through 7.

(c) The exemption under (b) above 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 at (b) above become final.

(d) A CO_2 budget unit exempt under (b) above shall comply with the restriction on percentage of annual gross generation that may be supplied to the electric grid described in (b) above.

(e) A CO_2 budget unit exempt under (b) above shall report to the Department, in accordance with the applicable provisions at N.J.A.C. 7:27C-8.8, 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.

(f) For a period of 10 years from the date the records are created, the owners and operators of a unit exempt under (b) above shall retain, at the source that includes the unit, records demonstrating that the conditions of the permit under (b) 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.

(g) The owners and operators and, to the extent applicable, the CO_2 authorized account representative of a CO_2 budget unit exempt under (b) above shall comply with all the requirements of this chapter 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.

(h) A CO_2 budget unit exempt under (b) above will lose its exemption upon the occurrence of either of the following:

1. The restriction on the percentage of annual gross generation that may be supplied to the electric grid described in (b) above 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

2. The unit fails to comply or 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 (b) above during any year that commences on or after January 1, 2009.

(i) A unit that loses its exemption in accordance with (h) above shall be subject to the requirements of this chapter. For the purposes of this chapter, the date of commencement of operation for a unit that loses its exemption pursuant to (h) above will be the date the unit loses its exemption.

(j) In the event that the Department grants an exemption under this section to one or more units that on January 1, 2005, serves an electricity generator with a nameplate capacity equal to or greater than 25 MWe, the Department will retire for each subsequent allocation year the number of CO_2 allowances equal to the unit's average annual CO_2 emissions over the most recent three calendar years for which data are available.

7:27C-1.4 General provisions

(a) The CO_2 authorized account representative of each CO_2 budget source required to have an operating permit pursuant to N.J.A.C. 7:27-22 and each CO_2 budget unit required to have an operating permit pursuant to N.J.A.C. 7:27-22 shall:

1. Submit to the Department a complete application for a new, renewed, or modified operating permit under N.J.A.C. 7:27C-3.3 in accordance with the deadlines specified in N.J.A.C. 7:27C-3.2; and

2. Submit in a timely manner any supplemental information that the Department determines is necessary in order to review the operating permit application and issue or deny an operating permit, permit renewal, or permit modification that includes CO_2 Budget Trading Program requirements.

(b) The owners and operators of each CO_2 budget source required to have an operating permit pursuant to N.J.A.C. 7:27-22 and of each CO_2 budget unit required to have an operating permit pursuant to N.J.A.C. 7:27-22 for the source shall have an operating permit that incorporates the requirements of the CO_2 budget trading program and shall operate the CO_2 budget source and the CO_2 budget unit at the source in compliance with such operating permit.

(c) 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 N.J.A.C. 7:27C-8.

(d) The Department will use the emissions measurements recorded and reported in accordance with N.J.A.C. 7:27C-8 to determine compliance by the unit with the CO_2 requirements at (e) below. For the purpose of determining compliance with (f) below, total tons for a 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 N.J.A.C. 7:27C-8. The Department will round total CO_2 emissions to the nearest whole ton, so that any fraction of a ton equal to or greater than 0.50 tons is deemed to equal one ton and any fraction of a ton less than 0.50 tons is deemed to equal zero tons.

(e) A CO_2 budget unit shall be subject to the requirements at (f) below starting on January 1, 2009, or the date on which the unit commences operation, whichever comes later.

(f) 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

N.J.A.C. 7:27C-6.9, 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, as determined in accordance with N.J.A.C. 7:27C-6 and 8.

(g) Each ton of CO_2 emitted in excess of the CO_2 budget emissions limitation shall constitute a separate violation of this subchapter and applicable State law.

(h) CO_2 allowances shall be held in, deducted from, or transferred among CO_2 Allowance Tracking System accounts in accordance with N.J.A.C. 7:27C-5, 6 and 7.

(i) A CO_2 allowance shall not be deducted, in order to comply with (f) above, for a control period that ends prior to the year for which the CO_2 allowance was allocated.

(j) A CO_2 offset allowance shall not be deducted, in order to comply with (f) above, beyond the applicable percent limitations at N.J.A.C. 7:27C-6.9(a)3.

(k) A CO_2 allowance is a limited authorization by the Department or a participating state to emit one ton of CO_2 in accordance with this chapter. No provision of the CO_2 Budget Trading Program, this chapter, the application for a new or modified operating permit to incorporate the requirements of the CO_2 Budget Trading Program, or the operating permit that includes the requirements of the CO_2 Budget Trading Program shall be construed to limit the authority of the Department or a participating state to terminate or limit such authorization.

(*l*) A CO_2 allowance does not constitute a property right.

(m) The owners and operators of a CO_2 budget source that has excess emissions in any control period shall:

1. Forfeit the CO_2 allowances required for deduction under N.J.A.C. 7:27C-6.9(e);

2. Not use any CO_2 offset allowances to cover any part of such excess emissions; and

3. Pay any fine, penalty, or assessment or comply with any other remedy imposed under N.J.A.C. 7:27C-6.9(f).

(n) Except as provided at (n)1 below, the owners and operators of the CO_2 budget source and each CO_2 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. The Department may at any time prior to the end of the 10-year period extend the 10-year period, if it determines that retention of the documents beyond the 10-year period is necessary to determine compliance with the requirements of this chapter:

1. The account certificate of representation for the CO_2 authorized account representative for the CO_2 budget source and each CO_2 budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with N.J.A.C. 7:27C-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 by a submitted new account certificate of representation changing the CO_2 authorized account representative of the CO_2 budget source;

2. All emissions monitoring information, in accordance with N.J.A.C. 7:27C-8;

3. Copies of all reports, compliance certifications, and other submissions, and all records made or required under the CO_2 Budget Trading Program; and

4. Copies of all documents used to complete an application for a new or modified operating permit that incorporates the requirements of the CO_2 Budget Trading Program and any other submission under the CO_2 Budget Trading Program or to demonstrate compliance with the requirements of the CO_2 Budget Trading Program.

(*o*) 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 this chapter, including the requirements at N.J.A.C. 7:27C-4.

(p) A violation of the requirements of this chapter cannot be cured by a revision to the operating permit of a CO_2 budget source if that revision is effective after the violation occurs.

(q) Each provision of this chapter that applies to a CO_2 budget source or to the CO_2 authorized account representative of the CO_2 budget source also applies to the owners and operators of such source and of the CO_2 budget units at the source.

(r) Each provision of this chapter that applies to a CO_2 budget unit or to the CO_2 authorized account representative of the CO_2 budget unit also applies to the owners and operators of such unit.

(s) No provision of the CO_2 Budget Trading Program, this chapter, the application for a new, renewed, or modified operating permit to incorporate the requirements of the CO_2 Budget Trading Program, or the operating permit that includes the requirements of the CO_2 Budget Trading Program, 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.

7:27C-1.5 Computation of time

(a) Unless otherwise stated, any time period scheduled, pursuant to this chapter, to begin on the occurrence of an act or event shall begin on the day the act or event occurs.

(b) Unless otherwise stated, any time period scheduled, pursuant to this chapter, 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.

(c) Unless otherwise stated, if the final day of any time period, pursuant to this chapter, falls on a weekend or a State or Federal holiday, the time period shall be extended to the next business day.

7:27C-1.6 Appeal procedure

(a) A person who believes himself or herself to be aggrieved with respect to a decision made by the Department may appeal the decision within 20 calendar days after the date of the decision and request an administrative hearing.

(b) Requests for an administrative hearing shall be submitted to:

Department of Environmental Protection
Office of Legal Affairs
ATTENTION: Adjudicatory Hearing Requests
Mail Code 401-04L
401 East State Street, 4th Floor
PO Box 402
Trenton, New Jersey 08625-0402

(c) All requests for an administrative hearing shall be submitted to the Department in writing on a hearing request form available from the Department and shall contain:

1. The name, address, and telephone number of the person making the request;

2. When the request is submitted by someone other than the applicant, evidence that a copy of the hearing request has been mailed to the applicant;

3. A statement of the legal authority and jurisdiction under which the request for a hearing is made;

4. A brief and clear statement of the Department decision being appealed, indicating the specific grounds for the applicant's appeal;

5. A copy of the Department notice or decision for which a hearing is being requested;

6. A statement of all facts alleged to be at issue and their relevance to the Department decision for which a hearing is requested. Any legal issues associated with the alleged facts at issue shall also be included; and

7. All information supporting the request or other written documents relied upon to support the request, unless this information is already in the administrative record (in which case, such information shall be specifically referenced in the request).

(d) The Department will deny any hearing request it did not receive within 20 calendar days after the date of the Department decision being appealed.

(e) The Department may deny any hearing request if the applicant or interested party fails to include all the information required by (c) above.

(f) Following receipt of a complete request for a hearing pursuant to (c) above, the Department may attempt to informally settle the dispute by conducting such proceedings, meetings, and conferences as it deems appropriate.

(g) If the Department determines that the matter is a contested case, the Department will submit the request for an administrative hearing to the Office of Administrative Law. Such hearings will be conducted in accordance with the provisions of the Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq. and 52:14F-1 et seq. and the Uniform Administrative Procedure Rules, N.J.A.C. 1:1. In making such determination, the Department will evaluate the request to determine whether a contested case exists and whether there are issues of fact, which, if assumed to be true, might change the Department's decision. Where only issues of law are raised by a request for a hearing, the request will be denied. Denial by the Department of a request for a contested case hearing shall constitute the final decision of the Department for the purposes of judicial appeal.

(h) Nothing in this section shall be construed to provide a right to an adjudicatory hearing in contravention of N.J.S.A. 52:14B-3.1 through 3.3.

(i) As part of a request for an adjudicatory hearing, a person may request that the Department determine whether the matter for which the adjudicatory hearing is requested is suitable for mediation by the Department's Office of Dispute Resolution. The Department shall promptly notify the requester of its determination. If the Department determines the matter is suitable for mediation, it shall also notify the requester of the procedures and schedule for mediation.

(j) At the conclusion of any adjudicatory hearing in the Office of Administrative Law, the administrative law judge will submit an initial decision to the Commissioner. The Commissioner will issue a final decision affirming, rejecting, or modifying the findings of fact and conclusions of law in the Initial Decision, in accordance with the Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq., and the Uniform Administrative Procedure Rules, N.J.A.C. 1:1.

(k) The Commissioner's final decision under (j) above may be appealed to the Appellate Division of the Superior Court, within the time provided by court rule.

Administrative change.
See: 43 N.J.R. 2328(a).

7:27C-1.7 Severability

If any provision of this chapter or the application thereof to any person or circumstance is adjudicated to be invalid or unenforceable to any extent, the remainder of this chapter or its application to any person or circumstance other than those that are the subject of the adjudication shall continue to be unaffected by the adjudication.

SUBCHAPTER 2. CO_2 AUTHORIZED ACCOUNT REPRESENTATIVE OF A CO_2 BUDGET SOURCE

7:27C-2.1 Authorization and responsibilities of the CO_2 authorized account representative of a CO_2 budget source

(a) Except as provided under N.J.A.C. 7:27C-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 regulated by this chapter concerning the source or any CO_2 budget unit at the source.

(b) The CO_2 authorized account representative of the CO_2 budget source shall be selected pursuant to an agreement binding on the owners and operators of the source and all CO_2 budget units at the source.

(c) If the CO_2 budget source is also subject to the CAIR NO_X Ozone Season Trading Program, CAIR NO_X Annual Trading Program, or CAIR SO_2 Trading Program, then the CO_2 authorized account representative of the CO_2 budget source shall be the same as the CAIR designated representative. If the CO_2 budget source is also subject to the Acid Rain Program, then the CO_2 authorized account representative shall be the same as the Acid Rain Program designated representative.

(d) Upon receipt by the Department of a complete account certificate of representation under N.J.A.C. 7:27C-2.4, the CO_2 authorized account representative of the CO_2 budget 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 of the CO_2 budget source and such owners and operators. The owners and operators shall be bound by any decision or order regarding the source or unit issued to the CO_2 authorized account representative of the CO_2 budget source by the Department or a court of competent jurisdiction.

(e) The Department will issue an operating permit that incorporates the requirements of the CO_2 Budget Trading Program and establish a CO_2 Allowance Tracking System account for a CO_2 budget source only after it has received a complete account certificate of representation that complies with N.J.A.C. 7:27C-2.4 for a CO_2 authorized account representative of the CO_2 budget source and the CO_2 budget units at the source.

(f) 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 by the CO_2 authorized account representative of the CO_2 budget source: "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."

(g) The Department will accept or act on a submission made on behalf of owners or operators of a CO_2 budget source or a CO_2 budget unit only if the submission has been made, signed, and certified in accordance with (f) above.

7:27C-2.2 Alternate CO_2 authorized account representative of the CO_2 budget source

(a) An account certificate of representation may designate one and only one alternate CO_2 authorized account representative of the CO_2 budget source who may act on behalf of the CO_2 authorized account representative of the CO_2 budget source.

(b) The agreement by which the alternate CO_2 authorized account representative is selected shall include a procedure for authorizing the alternate CO_2 authorized account representative of the CO_2 budget source to act in lieu of the CO_2 authorized account representative of the CO_2 budget source.

(c) Upon receipt by the Department of a complete account certificate of representation under N.J.A.C. 7:27C-2.4, any representation, action, inaction, or submission by the alternate CO_2 authorized account representative of the CO_2 budget source will be deemed to be a representation, action, inaction, or submission by the CO_2 authorized account representative of the CO_2 budget source.

7:27C-2.3 Changing the CO_2 authorized account representative of the CO_2 budget source and the alternate CO_2 authorized account representative of the CO_2 budget source; changes in the owners and operators

(a) The CO_2 authorized account representative of the CO_2 budget source (or the alternate CO_2 authorized account representative of the CO_2 budget source) may be changed at any time by submitting a superseding complete account certificate of representation to the Department, pursuant to N.J.A.C. 7:27C-2.4. The change in the CO_2 authorized account representative of the CO_2 budget source or the alternate CO_2 authorized account representative of the CO_2 budget source is effective upon receipt by the Department of the superseding complete account certificate of representation. Notwithstanding any such change, all representations, ac-

tions, inactions, and submissions by the previous CO_2 authorized account representative of the CO_2 budget source or alternate CO_2 authorized account representative of the CO_2 budget source prior to the time and date that the Department receives the superseding account certificate of representation shall be binding on the new CO_2 authorized account representative of the CO_2 budget source and the new alternate CO_2 authorized account representative of the CO_2 budget source and the owners and operators of the CO_2 budget source and the CO_2 budget units at the source.

(b) In the event a new owner or operator of a CO_2 budget source or a CO_2 budget unit is not included in the list of owners and operators submitted in the account certificate of representation, such new owner or operator is subject to and bound by the account certificate of representation, the representations, actions, inactions, and submissions of the CO_2 authorized account representative and any alternate CO_2 authorized account representative of the CO_2 budget source or CO_2 budget unit, and the decisions, orders, actions, and inactions of the Department, as if the new owner or operator were included in such list.

(c) Within 30 days following any change in the owners and operators of a CO_2 budget source or a CO_2 budget unit, including the addition of a new owner or operator, the CO_2 authorized account representative of the CO_2 budget source or alternate CO_2 authorized account representative of the CO_2 budget source shall submit a revision to the account certificate of representation amending the list of owners and operators to include the change.

7:27C-2.4 Account certificate of representation

(a) A complete account certificate of representation for a CO_2 authorized account representative or an alternate CO_2 authorized account representative for a CO_2 budget source shall include the following elements in a format prescribed by the Department:

1. Identification of the CO_2 budget source and each CO_2 budget unit at the source for which the account certificate of representation is submitted;

2. The name, address, e-mail address, telephone number, and facsimile transmission number of the CO_2 authorized account representative of the CO_2 budget source and any alternate CO_2 authorized account representative of the CO_2 budget source;

3. A list of the owners and operators of the CO_2 budget source and of each CO_2 budget unit at the source;

4. The following certification by the CO_2 authorized account representative of the CO_2 budget source and any alternate CO_2 authorized account representative of the CO_2 budget source: "I certify that I was selected as the CO_2 authorized account representative of the CO_2 budget source (or alternate CO_2 authorized account representative of the CO_2 budget source, 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 of competent jurisdiction regarding the source or unit."; and

5. The signature of the CO_2 authorized account representative of the CO_2 budget source and any alternate CO_2 authorized account representative of the CO_2 budget source, and the dates signed.

(b) Unless otherwise required by the Department, documents of agreement referred to in the account certificate of representation shall not be submitted to the Department. The Department will not be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

7:27C-2.5 Objections concerning the CO_2 authorized account representative of the CO_2 budget source or alternate CO_2 authorized account representative of the CO_2 budget source

(a) Once the Department has received a complete account certificate of representation under N.J.A.C. 7:27C-2.4, the Department will rely on the account certificate of representation, unless and until the Department receives a superseding complete account certificate of representation under N.J.A.C. 7:27C-2.4.

(b) Except as provided in N.J.A.C. 7:27C-2.3(a), no objection or other communication submitted to the Department concerning the authorization, or any representation, action, inaction, or submission of the CO_2 authorized account representative of the CO_2 budget source or the alternate CO_2 authorized account representative of the CO_2 budget source, will affect any representation, action, inaction, or submission of the CO_2 authorized account representative of the CO_2 budget source or the alternate CO_2 authorized account representative of the CO_2 budget source, or the finality of any decision or order by the Department under the CO_2 Budget Trading Program.

(c) The Department will not decide or otherwise intervene in any dispute concerning the authorization of, or any representation, action, inaction, or submission by any CO_2 authorized account representative of a CO_2 budget source or by any alternate CO_2 authorized account representative of a CO_2 budget source, including private legal disputes concerning the proceeds of CO_2 allowance transfers.

7:27C-2.6 Delegation of authority to make electronic submissions by the CO_2 authorized account representative of the CO_2 budget source and the alternate CO_2 authorized account representative of the CO_2 budget source

(a) The CO_2 authorized account representative of a CO_2 budget source and the alternate CO_2 authorized account representative of a CO_2 budget source may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Department under this chapter.

(b) To delegate authority to make an electronic submission to the Department, a CO_2 authorized account representative of a CO_2 budget source or alternate CO_2 authorized account representative of a CO_2 budget source, as appropriate, shall submit to the Department a notice of delegation, in a format prescribed by the Department, that includes the following elements:

1. The name, address, e-mail address, telephone number, and facsimile transmission number of the delegating CO_2 authorized account representative or alternate CO_2 authorized account representative;

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";

3. For each such natural person, a list of the types of electronic submissions under (a) above for which authority is delegated to him or her; and

4. The following certifications by the delegating CO_2 authorized account representative or the delegating alternate CO_2 authorized account representative, as appropriate:

i. "I agree that any electronic submission to the Department that is by the 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 alternate CO_2 authorized account representative, as appropriate,) and before this notice of delegation is superseded by another notice of delegation under N.J.A.C. 7:27C-2.6(c) shall be deemed to be an electronic submission by me."; and

ii. "Until this notice of delegation is superseded by another notice of delegation under N.J.A.C. 7:27C-2.6(c), I agree to maintain an e-mail account and to notify the Department immediately of any change in my e-mail address unless all delegation authority by me under N.J.A.C. 7:27C-2.6 is terminated."

(c) A notice of delegation submitted under (b) above shall be effective, with regard to the delegating CO_2 authorized account representative for the CO_2 budget source or the delegating alternate CO_2 authorized account representative for the CO_2 budget source identified in such notice, upon receipt of such notice by the Department and until receipt by the Department of a superseding notice of delegation by such CO_2 authorized account representative or alternate CO_2 authorized account representative, as appropriate. The superseding notice of delegation may replace any previously identified electronic submission agent, add a new electronic submission agent, or eliminate entirely any delegation of authority.

(d) Any electronic submission covered by the certification in (b)4 above and made in accordance with a notice of delegation effective under (b) above shall be deemed to be an electronic submission by the CO_2 authorized account representative of the CO_2 budget source or alternate CO_2 authorized account representative of the CO_2 budget source submitting such notice of delegation.

SUBCHAPTER 3. PERMITS

7:27C-3.1 General requirements for an operating permit incorporating CO_2 Budget Trading Program requirements

(a) Each CO_2 budget source must have an operating permit issued by the Department pursuant to N.J.A.C. 7:27-22.

(b) The operating permit for each CO_2 budget source shall contain all applicable CO_2 Budget Trading Program requirements, as set forth in N.J.A.C. 7:27C-3.3(a)3 through 6.

7:27C-3.2 Submission of an application for a new, renewed or modified operating permit incorporating CO_2 Budget Trading Program requirements

For any CO_2 budget source, the CO_2 authorized account representative shall submit a complete application under N.J.A.C. 7:27-22.28, and in conformance with the requirements of this chapter, to incorporate the CO_2 budget trading program requirements 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.

7:27C-3.3 Information requirements for an application for an operating permit incorporating CO_2 Budget Trading Program requirements

(a) A complete application for a new, renewed or modified operating permit for a CO_2 budget source shall include the following elements concerning the CO_2 budget source for which the application is submitted, in a format prescribed by the Department:

1. Identification of the CO_2 budget source, including plant name and the ORIS or facility code assigned to the source by the Energy Information Administration of the United States Department of Energy, if applicable;

2. Identification of each CO_2 budget unit at the CO_2 budget source;

3. The general provisions at N.J.A.C. 7:27C-1.4;

4. The compliance certification requirements at N.J.A.C. 7:27C-4.1;

5. The compliance requirements at N.J.A.C. 7:27C-6.9; and

6. The monitoring, recordkeeping and reporting requirements at N.J.A.C. 7:27C-8.

SUBCHAPTER 4. COMPLIANCE CERTIFICATION

7:27C-4.1 Compliance certification report

(a) For each control period in which a CO_2 budget source is subject to the CO_2 requirements of N.J.A.C. 7:27C-1.4, the CO_2 authorized account representative of the source shall submit a compliance certification report to the Department, in a format provided by the Department, by March 1 following the relevant control period.

(b) The CO_2 authorized account representative shall include in the compliance certification report under (a) above the following elements:

1. Identification of the CO_2 budget source and each CO_2 budget unit at the source;

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 CO_2 budget source's compliance account under N.J.A.C. 7:27C-6.9 for the control period, including the serial numbers of any CO_2 offset allowances that are to be deducted, subject to the limitations of N.J.A.C. 7:27C-6.9(a)3; and

3. The compliance certification under (c) below.

(c) In the compliance certification report required at (a) above, the CO_2 authorized account representative shall certify, based on reasonable inquiry of those persons with primary responsibility for operating the CO_2 budget source and the CO_2 budget units at the source in compliance with the CO_2 Budget Trading Program, whether the CO_2 budget 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:

1. Whether the CO_2 budget source was operated in compliance with the CO_2 requirements of N.J.A.C. 7:27C-1.4;

2. Whether the monitoring plan applicable to each CO_2 budget unit at the CO_2 budget source has been maintained to reflect the actual operation and monitoring of the CO_2 budget unit, and contains all information necessary to attribute CO_2 emissions to the CO_2 budget unit, in accordance with N.J.A.C. 7:27C-8;

3. Whether all the CO_2 emissions from the CO_2 budget units at the CO_2 budget 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 N.J.A.C. 7:27C-8. If conditional data were reported, the owner or operator shall indicate whether the status of all conditional data has been resolved and all necessary quarterly report resubmissions have been made;

4. Whether the facts that form the basis for certification under N.J.A.C. 7:27C-8 of each monitor at each CO_2 budget unit at the CO_2 budget source, or for using an excepted monitoring method or alternative monitoring method approved under N.J.A.C. 7:27C-8, if any, have changed; and

5. If a change is required to be reported under (c)4 above, the specific nature of the change, the reason for the change, when the change occurred, and how the CO_2 budget 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.

7:27C-4.2 Department action on compliance certifications

(a) The Department may review and conduct independent audits of any compliance certification or any other submission under N.J.A.C. 7:27C and make appropriate adjustments of the information in the compliance certification or other submission.

(b) The Department will deduct CO_2 allowances from or transfer CO_2 allowances to a CO_2 budget source's compliance account, as appropriate, based on the information in the compliance certification or other submission, as adjusted under (a) above.

SUBCHAPTER 5. CO_2 ALLOWANCE ALLOCATIONS

7:27C-5.1 New Jersey CO_2 Budget Trading Program base budget

(a) The New Jersey CO_2 Budget Trading Program annual base budget for the allocation years 2009 and later is as follows:

1. For the 2009 through 2014 allocation years, 22,892,730 tons;

2. For the 2015 allocation year, 22,320,412 tons;

3. For the 2016 allocation year, 21,748,094 tons;

4. For the 2017 allocation year, 21,175,775 tons; and

5. For the 2018 allocation year and each succeeding allocation year, 20,603,457 tons.

7:27C-5.2 CO_2 allowance allocations

(a) The Department will allocate CO_2 allowances representing 99 percent of the tons for each allocation year from the New Jersey CO_2 Budget Trading Program base budget set forth in N.J.A.C. 7:27C-5.1 to a consumer benefit account.

(b) The Department will distribute allowances from the consumer benefit account in accordance with N.J.A.C. 7:27C-5.3 through 5.5.

(c) The Department will allocate CO_2 allowances representing one percent of the tons for each allocation year from the New Jersey CO_2 Budget Trading Program annual base budget set forth in N.J.A.C. 7:27C-5.1 to a voluntary renewable energy market account. The Department will administer the voluntary renewable energy market account in accordance with the following procedures:

1. A retail provider of renewable energy or renewable energy attribute credits may submit a written request following the end of an allocation year to the Department to retire CO_2 allowances in the voluntary renewable energy market account for that allocation year. A request shall be submitted by the July 30 following the allocation year for which the request is being made and shall include sufficient information to demonstrate, to the satisfaction of the Department, that the voluntary renewable energy purchases referenced in the request resulted in avoided CO_2 emissions in a participating state or states during the allocation year. Any such request shall document that the voluntary renewable energy purchases addressed in such request represented a purchase of renewable energy or renewable energy attribute credits by an electricity ratepayer in New Jersey and that such purchases represented renewable energy or renewable energy attribute credits generated or created, as applicable, in a participating state or states. All data submitted must be verifiable and from reputable sources, which may include retail electricity providers, organizations that certify renewable energy products, and other parties, as determined to be appropriate by the Department. A request shall contain the following information:

i. Documentation of voluntary renewable energy or renewable energy attribute credit purchases by electricity ratepayers in New Jersey from the retail provider, designated in megawatt-hours or number of attribute credits by customer class in New Jersey during the allocation year, including documentation of the time period when the retail purchases were made;

ii. With respect to purchases documented pursuant to (c)1i above, documentation that the renewable energy or renewable energy attribute credits related to the voluntary renewable energy or renewable energy attribute credit purchases, designated by megawatt-hours or number of attribute credits, were procured by the retail provider;

iii. With respect to purchases documented pursuant to (c)1i above, documentation of the participating state where the electricity was generated or the renewable energy attribute credit was created, including documentation of the electric generation facility name, unique generator identification number, and fuel type; and

iv. With respect to purchases documented pursuant to (c)1i above, documentation of the time period when the electricity was generated or the renewable energy attribute credit was created;

2. By the October 31 that follows the July 30 request date at (c)1 above, the Department will determine the actual voluntary renewable energy purchases in New Jersey that occurred during the allocation year and that represent renewable energy generation in one or more participating states during the allocation year. The Department will multiply the megawatt-hours of demonstrated voluntary renewable energy purchases or the number of renewable energy attribute credit purchases during an allocation year by the marginal CO_2 emissions rate, in pounds of CO_2 per megawatt hour, for the control area where the generation occurred, as determined by the Department. If data to determine the marginal emissions rate are unavailable, the Department will use the average emissions rate, in pounds of CO_2 per megawatt hour, as determined by the Department;

3. The Department will calculate CO_2 allowances to be retired from the voluntary renewable energy market account for an allocation year as follows:

CO_2 tons = MP x EF

where:

CO_2 tons, rounded down to the nearest whole ton, is the number of CO_2 allowances to be retired from the voluntary renewable energy market account for a specific allocation year;

MP is the demonstrated megawatt-hours of voluntary renewable energy or the number of renewable energy attributes credits (with each attribute credit representing the attributes related to one megawatt-hour of electric generation) purchased in New Jersey during the applicable allocation year, as submitted and demonstrated to the satisfaction of the Department in accordance with (c)1 above; and

EF is the CO_2 emissions factor, in pounds of CO_2 per MWh, for the control area where the electricity represented by the sale was generated, for the applicable allocation

year, as determined by the Department pursuant to (c)2 above;

4. As of the November 30 that follows the allocation year referenced in a request pursuant to (c)1 above, the Department will retire CO_2 allowances in the voluntary renewable energy market account for the applicable allocation year in an amount up to the number of tons of avoided CO_2 emissions represented by actual voluntary renewable energy purchases, as determined by the Department pursuant to (c)2 and 3 above. In no event will the number of CO_2 allowances retired exceed the number of CO_2 allowances for a respective allocation year in the voluntary renewable energy market account;

5. If more than one retail provider of renewable energy or renewable energy attribute credits requests the retirement of CO_2 allowances, and the number of CO_2 allowances that are subject to the requests approved by the Department exceeds the number of CO_2 allowances for a respective allocation year in the voluntary renewable energy market account, the Department will retire CO_2 allowances from the account for such requests in the order in which such submitted retirement requests were received and subsequently approved by the Department. For purposes of this paragraph, requests will be considered simultaneous if they are made in the same month. Should retirement requests be submitted in the same month in excess of the allocation of allowances for a respective allocation year to the voluntary renewable energy market account, the Department will retire CO_2 allowances for such requests on a basis proportional to the number of CO_2 allowances requested for retirement and subsequently approved by the Department;

6. The Department will approve only those requests for CO_2 allowance retirements that demonstrate avoided CO_2 emissions during control periods starting on or after January 1, 2009; and

7. After retiring CO_2 allowances from the voluntary renewable market account for an allocation year pursuant to (c)4 above, the Department will transfer any remaining CO_2 allowances for that allocation year from the account to the consumer benefit account.

(d) The Department will allocate CO_2 allowances to CO_2 budget units that are cogeneration units pursuant to (e) through (k) below.

(e) In order for a CO_2 budget unit that is a cogeneration unit to qualify for the allocation of CO_2 allowances, the CO_2 budget unit shall meet the requirements at (g) and (h) below, and the CO_2 authorized account representative shall submit to the Department, by the March 30 following the end of the allocation year for which CO_2 allowances are being requested, a complete application, pursuant to (f) below, for the allocation of CO_2 allowances.

(f) An application for the allocation of CO_2 allowances shall include the following:

1. Documentation that the CO_2 budget unit meets the criteria for a cogeneration unit;

2. Documentation that the CO_2 budget unit meets the applicable thermal efficiency requirements at (g)2 and 3 and (h)2 below;

3. Identification of the compliance account for the CO_2 budget unit;

4. Identification of the allocation year for which an allocation request is being made;

5. Specification of the number of CO_2 allowances being requested, as calculated pursuant to (j) or (k) below, as appropriate; and

6. The calculations and supporting data used to determine the number of CO_2 allowances being requested, and an explanation of the data and the methods on which the calculations are based.

(g) To qualify for the allocation of allowances pursuant to (j) below, a CO_2 budget unit shall meet the following requirements:

1. The CO_2 budget unit must be a cogeneration unit;

2. The CO_2 authorized account representative for the CO_2 budget unit has not accepted a fixed-price sale offer of CO_2 allowances from the Department for the CO_2 budget unit pursuant to N.J.A.C. 7:27C-5.4(b) during the calendar year that corresponds to the allocation year for which the request for CO_2 allowances pursuant to (f) above is being made;

3. For the allocation of CO_2 allowances for the 2009 through 2011 allocation years, a CO_2 budget unit that is a cogeneration unit shall meet the following thermal efficiency levels, as demonstrated during the allocation year for which an allocation request is being submitted:

i. 42.5 percent thermal efficiency for a topping-cycle cogeneration unit if useful thermal energy produced is 15.0 percent or more of total energy output;

ii. 45.0 percent thermal efficiency for a topping-cycle cogeneration unit if useful thermal energy produced is less than 15.0 percent of total energy output;

iii. 45.0 percent thermal efficiency for all bottoming-cycle cogeneration units; and

4. For the allocation of CO_2 allowances for the 2012 allocation year and subsequent allocation years, a CO_2 budget unit that is a cogeneration unit shall meet a thermal efficiency level of 60.0 percent, as demonstrated during the allocation year for which an allocation request is being submitted.

(h) To qualify for the allocation of CO_2 allowances pursuant to (k) below, a CO_2 budget unit shall meet the following requirements:

1. The CO_2 budget unit must be a cogeneration unit;

2. The CO_2 authorized account representative for the CO_2 budget unit has not accepted a fixed-price sale offer of CO_2 allowances from the Department for the CO_2 budget unit pursuant to N.J.A.C. 7:27C-5.4(b) during the calendar year that corresponds to the allocation year for which the request for CO_2 allowances pursuant to (f) above is being made; and

3. The CO_2 budget unit shall meet a thermal efficiency of 70.0 percent, as demonstrated during the allocation year for which an allocation request is being submitted.

(i) A CO_2 budget unit shall demonstrate thermal efficiency as follows:

$$\text{Percent efficiency} = \frac{UP + UTE}{TEI} \times 100\%$$

where:

UP = useful power, represented in MMBtu, based on a conversion of 3.413 MMBtu per MWh, and reported in accordance with N.J.A.C. 7:27C-8.8;

UTE = useful thermal energy in MMBtu for the allocation year, as based on reported net steam output pursuant to N.J.A.C. 7:27C-8.8, provided that for the 2009 allocation year, 2009 data shall be used; and

TEI = total energy input in MMBtu, as reported pursuant to N.J.A.C. 7:27C-8.

(j) The Department will determine the allocation for a CO_2 budget unit that is a cogeneration unit that meets the applicable requirements at (g) above as follows:

$$CO_2 \text{ Allowances} = \frac{UTE}{LHV} \times \frac{EF_{CO2}}{2000}$$

where:

UTE = useful thermal energy in MMBtu for the allocation year, as based on reported net steam output pursuant to N.J.A.C. 7:27C-8.8, provided that for a request for CO_2 allowances for the 2009 allocation year, the Department will use reported 2009 net steam output data;

LHV = lower heating value of the fuel from EPA, Compilation of Air Pollutant Emissions Factors, Volume I: Stationary Point and Area Sources (AP-42), 1995, as supplemented and amended and incorporated by reference herein, which may be accessed electronically through the EPA Technology Transfer Network CHIEF site at http://www.epa.gov/ttn/chief/ap42/index.html;

EF_{CO2} = CO_2 emission factor for the fuel from EPA, Compilation of Air Pollutant Emissions Factors, Volume I: Stationary Point and Area Sources (AP-42), 1995, as supplemented and amended and incorporated by reference herein, which may be accessed electronically through the EPA Technology Transfer Network CHIEF site at http://www.epa.gov/ttn/chief/ap42/index.html; and

2000 = conversion from lbs to tons.

(k) The Department will determine the allocation for a CO_2 budget unit that is a cogeneration unit that meets the applicable requirements at (h) above based on the CO_2 emissions for the CO_2 budget unit during the allocation year for which an allocation request is being submitted. The Department will allocate CO_2 allowances in a number equivalent to the CO_2 emissions of the CO_2 budget unit during the allocation year.

(*l*) The Department will award early reduction CO_2 allowances to a CO_2 budget source for reductions in the CO_2 budget source's CO_2 emissions (inclusive of all emissions from CO_2 budget units at the CO_2 budget source) that are achieved by the source during the early reduction period (2006, 2007, and 2008), pursuant to (m) through (q) below. Total facility shutdowns are not eligible for early reduction CO_2 allowances.

(m) The CO_2 budget source shall submit its application to the Department for the award of early reduction CO_2 allowances by May 1, 2009.

(n) The CO_2 budget source shall demonstrate that all CO_2 budget units that existed at the source during the baseline period (2003, 2004, and 2005) are included as CO_2 budget units for the early reduction period. New CO_2 budget units added at the CO_2 budget source shall also be accounted for during the early reduction period.

(*o*) The Department will calculate the number of early reduction CO_2 allowances to be awarded to a particular CO_2 budget source for the early reduction period pursuant to the following methodology, as appropriate:

1. If total heat input to all CO_2 budget units at the CO_2 budget source during the early reduction period is less than or equal to the total heat input to all the CO_2 budget units at the CO_2 budget source during the baseline period, then early reduction CO_2 allowances will be calculated as follows:

$$ERAs = ((AEER_{BASELINE} - AEER_{ERP}) \times (EO_{ERP} + (TO_{ERP}/3.413))/2000$$

where:

"ERAs" is the number of early reduction CO_2 allowances, represented as tons of CO_2;

"$AEER_{BASELINE}$" is the average CO_2 emissions rate resulting from electric energy output and thermal energy output for all of the CO_2 budget units at the CO_2 budget source during the baseline period (in pounds of CO_2/MWhth+e);

"$AEER_{ERP}$" is the average CO_2 emissions rate resulting from electric energy output and thermal energy output for all of the CO_2 budget units at the CO_2 budget source during the early reduction period (in pounds of CO_2 /MWhth+e);

"EO_{ERP}" is the total electric energy output from all CO_2 budget units at the CO_2 budget source during the early reduction period (in MWhe); and

"TO_{ERP}" is the total useful thermal energy output from all CO_2 budget units at the CO_2 budget source during the early reduction period (in MMBtu); or

2. If total heat input to all CO_2 budget units at the CO_2 budget source during the early reduction period is greater than the total heat input to all the CO_2 budget units at the CO_2 budget source during the baseline period, then early reduction CO_2 allowances will be calculated as follows:

$ERAs = E_{BASELINE} - E_{ERP}$

where:

"ERAs" is the number of early reduction CO_2 allowances, represented as tons of CO_2;

"$E_{BASELINE}$" is total CO_2 emissions from all of the CO_2 budget units at the CO_2 budget source during the baseline period (in tons); and

"E_{ERP}" is total CO_2 emissions from all of the CO_2 budget units at the CO_2 budget source during the early reduction period (in tons).

(p) The CO_2 budget source shall demonstrate that the data submitted in support of the early reduction application were recorded in accordance with the requirements of N.J.A.C. 7:27C-8 for all of the baseline years and the early reduction years for which the CO_2 budget source was required to report CO_2 data pursuant to 40 CFR Part 75. A CO_2 budget source that was not required to submit CO_2 data pursuant to 40 CFR Part 75 for any of the years contained in the baseline period or early reduction period may petition the Department, as part of its application for early reduction CO_2 allowances submitted pursuant to N.J.A.C. 7:27C-5.2(d), for the use of an alternative data source or sources for the calculation of early reduction allowances.

(q) After the Department confirms a CO_2 budget source's early reductions of CO_2 emissions, it will award the early reduction CO_2 allowances to the CO_2 budget source's compliance account by December 31, 2009.

7:27C-5.3 Timing requirements for distribution of CO_2 allowances in the consumer benefit account

Except for CO_2 allowances transferred by the Department into the consumer benefit account pursuant to N.J.A.C. 7:27C-5.2(c)7 or allocated to a CO_2 budget source pursuant to N.J.A.C. 7:27C-5.2(j) and (k), the Department will make all CO_2 allowances for an allocation year that are held in the consumer benefit account for that allocation year available for purchase or auction by no later than the December 31 of the calendar year that corresponds to that allocation year.

7:27C-5.4 Distribution of CO_2 allowances in the consumer benefit account

(a) Except for those CO_2 allowances allocated to a CO_2 budget unit pursuant to N.J.A.C. 7:27C-5.2(j) and (k) or sold to a CO_2 authorized account representative pursuant to (b) below, the Department will make all CO_2 allowances for a respective allocation year that are held in the consumer benefit account available for sale through an auction administered on behalf of the Department, pursuant to N.J.A.C. 7:27C-5.5.

(b) On an annual basis, the Department will make CO_2 allowances in the consumer benefit account available for sale to the CO_2 authorized account representative of a CO_2 budget unit or units at a certified dispatch agreement facility through a fixed-price sale offer, as follows:

1. The Department will apportion CO_2 allowances available annually for sale to each CO_2 budget unit at a certified dispatch agreement facility based on the average annual CO_2 emissions for the CO_2 budget unit, as determined by the Department, for the most recent three-year period for which complete CO_2 emissions data are available. The Department will use emissions data as reported pursuant to N.J.A.C. 7:27C-8, if available, and as supplemented by such other data as necessary, in making such a determination;

2. The Department will offer CO_2 allowances made available for sale through a fixed-price sale offer for a price of $2.00 per CO_2 allowance;

3. The Department will publish notice of the procedures for purchasing CO_2 allowances through a fixed-price sale offer at least 45 days prior to the fixed-price sale offer. The public notice will include the following:

i. The number of CO_2 allowances available for purchase by a CO_2 authorized account representative on behalf of each CO_2 budget unit at a certified dispatch agreement facility; and

ii. The procedures for purchasing CO_2 allowances through the fixed-price sale offer, including the date by which a purchase option shall be exercised by a CO_2 authorized account representative on behalf of a CO_2 budget unit at a certified dispatch agreement facility, and the procedures for exercising a purchase option;

4. The CO_2 authorized account representative for a CO_2 budget unit at a certified dispatch agreement facility shall notify the Department by the deadline specified in the Department's notice of a fixed-price sale offer issued pursuant to (b)3 above as to whether the CO_2 authorized account representative accepts the Department's sale offer of CO_2 allowances for a specified CO_2 budget unit. The CO_2 authorized account representative shall specify the

number of CO_2 allowances the CO_2 authorized account representative intends to purchase on behalf of each CO_2 budget unit, up to the number specified by the Department in the notice, as specified pursuant to (b)3 above for the applicable CO_2 budget unit; and

5. For those CO_2 allowances purchased by a CO_2 authorized account representative on behalf of a CO_2 budget unit, the Department will allocate allowances to the compliance account of the CO_2 budget unit.

(c) For a CO_2 budget source to be eligible to receive a fixed-price sale offer from the Department pursuant to (b) above, the owner or operator of the CO_2 budget source shall certify to the Department, through a sworn affidavit and supporting documentation from an independent entity, signed by both an official representative of the independent entity and by the chief financial officer or equivalent of the owner or operator of the CO_2 budget source, that the CO_2 budget source meets the criteria for a dispatch agreement facility as follows:

1. The CO_2 budget source is a cogeneration facility or the CO_2 budget source has a heat rate of less than 8,100 Btu per kilowatt-hour electric; and

2. The CO_2 budget source is subject to a power purchase agreement that includes the following conditions:

i. The agreement was executed prior to January 1, 2002;

ii. The agreement is for a duration of more than 15 years from its effective date;

iii. The agreement provides that the counterpart to the agreement that purchases energy from the facility controls the electric dispatch of the facility;

iv. The agreement does not allow for the facility to pass the cost of CO_2 allowances on to the counterpart to the agreement that purchases energy from the facility; and

v. The agreement is currently in effect.

(d) The owner or operator of a CO_2 budget source certified as a dispatch agreement facility shall provide on-site access, upon the request of the Department, to any information the Department requires to determine the validity of the certification provided pursuant to (c) above.

(e) If, subsequent to the submittal of a sworn affidavit and supporting documentation pursuant to (c) above, there is any material change to the information and statements contained in the sworn affidavit and supporting material, the persons who submitted the sworn affidavit and supporting material shall submit a supplemental sworn affidavit and supporting material addressing any such material change within 30 days after the change occurs. If the supplemental sworn affidavit and supporting material is not submitted to the Department, the CO_2 budget source will not be eligible to receive a fixed-price sale offer.

(f) At such time that the power purchase agreement documented pursuant to (c)2 above for a certified dispatch agreement facility expires or is terminated, or when the services under a new contract become effective, the facility will no longer be considered a certified dispatch agreement facility.

(g) Any signatory to a sworn affidavit submitted pursuant to (c) above who knowingly gives or causes to be given any false or misleading information or who knowingly makes any false or misleading statement in such affidavit shall be subject to the penalties and financial assessments outlined at N.J.S.A. 26:2C-49e, and the CO_2 budget unit referenced in the affidavit shall no longer be considered a certified dispatch agreement facility.

(h) Any CO_2 allowances purchased by a CO_2 authorized account representative on behalf of a CO_2 budget unit at a certified dispatch agreement facility and that remain in the compliance account for the related CO_2 budget source subsequent to the compliance deduction by the Department of CO_2 allowances for a control period pursuant to N.J.A.C. 7:27C-6.9(b) shall be assigned to the consumer benefit account established pursuant to N.J.A.C. 7:27C-5.2(a).

7:27C-5.5 Auction of CO_2 allowances

(a) The Department will conduct auctions to sell CO_2 allowances allocated to the consumer benefit account in accordance with N.J.A.C. 7:27C-5.5 through 5.18.

(b) Implementation and administrative support functions for any CO_2 allowance auction conducted pursuant to N.J.A.C. 7:27C-5.5 through 5.18 may be delegated by the Department to an agent qualified to conduct auctions, including a regional entity, provided that such agent shall perform all such functions under the direction and oversight of the Department.

(c) The proceeds from the auction of CO_2 allowances will be deposited in the Global Warming Solutions Fund established pursuant to N.J.S.A. 26:2C-50.

7:27C-5.6 Auction format

(a) In conducting CO_2 allowance auctions, the Department will employ one or more of the following auction formats:

1. Uniform-price sealed-bid;
2. Discriminatory-price sealed-bid;
3. Ascending price, multiple-round; or
4. Descending price, multiple round.

(b) The Department will auction CO_2 allowances in lots of 1,000 CO_2 allowances, except in such instance where the

volume of CO_2 allowances auctioned requires an individual lot size smaller than 1,000.

7:27C-5.7 Auction timing and CO_2 allowance submission schedule

(a) The Department will hold CO_2 allowance auctions no less frequently than annually, and as frequently as determined by the Department to be necessary and practical to ensure the availability of CO_2 allowances to CO_2 budget units and to support the effective functioning of the CO_2 allowance market.

(b) Prior to the end of a control period, the Department will make available for sale all CO_2 allowances of allocation years that fall within the control period that are held in the consumer benefit account, less any CO_2 allowances allocated pursuant to N.J.A.C. 7:27C-5.2(j) and (k) and 5.4(b).

(c) In each CO_2 allowance auction, the Department will make available for sale CO_2 allowances of allocation years that fall within a corresponding control period and CO_2 allowances of allocation years that fall within a subsequent future control period, in a number as determined to be appropriate by the Department.

(d) The number of CO_2 allowances to be made available for sale in a specific auction will be disclosed in the notice of CO_2 allowance auction issued pursuant to N.J.A.C. 7:27C-5.9.

7:27C-5.8 Reserve price and disposition of unsold allowances

(a) The Department will establish a reserve price for each CO_2 allowance auction, which is the price below which no CO_2 allowances will be sold. The Department will publicly announce the reserve price prior to each CO_2 allowance auction.

(b) The monetary amount of the reserve price established by the Department will be the higher of the minimum reserve price or the current market reserve price, as determined by the Department, unless the Department determines there are not enough data available to justify the calculation of a current market reserve price, in which case the established reserve price will be the minimum reserve price.

(c) If, after a CO_2 allowance auction has been held, any CO_2 allowances offered for sale at the CO_2 allowance auction remain unsold, such unsold CO_2 allowances will be distributed as follows:

1. Unsold CO_2 allowances of a particular allocation year will be made available for sale in the subsequent CO_2 allowance auction for CO_2 allowances of that allocation year, subject to the limitations at (c)2 below, provided a reserve price greater than the minimum reserve price is in effect for such CO_2 allowance auction; and

2. If following the end of a control period there are unsold CO_2 allowances of allocation years that fall within that control period, such CO_2 allowances will be distributed as follows:

i. The Department will offer such CO_2 allowances for sale in a subsequent CO_2 allowance auction or auctions during the next control period for which a reserve price greater than the minimum reserve price is in effect; or

ii. The Department will retire the unsold CO_2 allowances.

7:27C-5.9 Auction notice

(a) The Department will provide a notice of CO_2 allowance auction on the auction website no later than 45 days prior to the date upon which the auction will be conducted.

(b) The notice of CO_2 allowance auction will include, but not necessarily be limited to, the following:

1. The date, time, and location of the CO_2 allowance auction, including the Internet address or electronic address for the CO_2 allowance auction location, as applicable;

2. The format for the CO_2 allowance auction;

3. The number of CO_2 allowances to be auctioned, by allocation year;

4. The procedures for conducting the CO_2 allowance auction, including the required bid submission format and process, and information regarding financial settling of CO_2 allowance payments;

5. All CO_2 allowance auction participation requirements;

6. The amount and type of financial security required;

7. Participation limits, such as bidding limits that may apply to an individual bidder or a group of related bidders;

8. Application instructions for applying to participate in the CO_2 allowance auction, and application forms; and

9. Identification of a contact person for further information.

7:27C-5.10 Auction participant requirements

(a) In order to participate in a CO_2 allowance auction, a party must:

1. Be listed in the notice of CO_2 allowance auction issued pursuant to N.J.A.C. 7:27C-5.9(a) as a member of one of the categories of parties that are eligible to participate in the specified CO_2 allowance auction;

2. Open and maintain a compliance account or general account, established pursuant to N.J.A.C. 7:27C-6.2(a) or (b), respectively;

3. Submit a qualification application pursuant to N.J.A.C. 7:27C-5.12(a) and become qualified by the Department to participate in CO_2 allowance auctions pursuant to N.J.A.C. 7:27C-5.12(e); and

4. Submit financial security such as a bond, cash, certified funds, or an irrevocable stand-by letter of credit, in a manner and form acceptable to the Department, as specified in the notice of CO_2 allowance auction issued pursuant to N.J.A.C. 7:27C-5.9(a).

(b) Only a party that meets the requirements at (a) above will be classified by the Department as a bidder and approved to participate in a specified CO_2 allowance auction.

7:27C-5.11 Auction participant eligibility

(a) The Department will announce the categories of parties that are eligible to participate in a specific CO_2 allowance auction as part of the notice of CO_2 allowance auction, provided that an owner or operator of a CO_2 budget unit located in New Jersey is always eligible to participate in a CO_2 allowance auction.

(b) For any CO_2 allowance auction, the following categories of parties may be eligible to participate:

1. An owner or operator of a CO_2 budget unit located in New Jersey, which shall always be eligible to participate, pursuant to (a) above;

2. An owner or operator of a CO_2 budget unit located in a participating state; and

3. Any other market participants, as may be specified in the notice of CO_2 allowance auction, with or without limitation.

7:27C-5.12 Auction participant qualification

(a) Any party that intends to participate in a CO_2 allowance auction or auctions shall submit a qualification application to the Department, in the form and manner specified in the notice of CO_2 allowance auction.

(b) The deadline for submitting a qualification application will be established in the notice of CO_2 allowance auction and will be no sooner than 15 days following the publication of such notice.

(c) As part of a qualification application, an applicant shall provide information and documentation relating to the applicant's ability and authority to execute bids and honor contractual obligations, as well as information required to ensure adherence to the auction requirements and procedures specified in N.J.A.C. 7:27C-5.10, 5.11, and 5.13 through 5.15, as follows:

1. Identification by the applicant of either a compliance account or general account, established pursuant to N.J.A.C. 7:27C-6.2(a) or (b), and identification of the CO_2 authorized account representative for such compliance account or general account;

2. Information and documentation regarding the corporate identity, ownership, affiliations, and capital structure of the entity represented by the applicant;

3. Identification of any indictment or felony conviction of the applicant or any member, director, principle, partner, or officer of the entity represented by the applicant or any affiliate or related entity;

4. Identification of any previous or pending investigation of the applicant or the entity represented by the applicant or any affiliate or related entity, with respect to any alleged violation of any rule, regulation, or law associated with any commodity market or exchange; and

5. Such other information and declarations as the Department determines may be required of an applicant in order to evaluate prospective auction participants and ensure the integrity of the CO_2 allowance auction process in accordance with the requirements and procedures for CO_2 allowance auctions established at N.J.A.C. 7:27C-5.10, 5.11, and 5.13 through 5.15.

(d) The Department will determine whether a qualification application is complete, incomplete, or otherwise deficient. If the Department determines that an application is incomplete or otherwise deficient, the applicant will be given a reasonable opportunity, and in no event less than five business days and no more than 10 business days, as specified in the notice of CO_2 allowance auction, to provide additional information to the Department in order to complete the application or remedy any application deficiency.

(e) The Department will review a complete qualification application and make a determination as to whether the applicant is qualified to participate in CO_2 allowance auctions. The Department will make a determination as to the qualification status of the applicant by the deadline for such determination specified in the notice of CO_2 allowance auction.

(f) The Department may deny qualification to a party based on information submitted in a qualification application in order to ensure the integrity of the CO_2 allowance auction process in accordance with the requirements and procedures for auctions established at N.J.A.C. 7:27C-5.10, 5.11, and 5.13 through 5.15.

(g) The Department may revoke the qualification status of a party, if such party fails to comply with the requirements of N.J.A.C. 7:27C-5.10, 5.11, and 5.13 through 5.15, or if the Department determines that such party has provided false or misleading information or withheld pertinent information from its qualification application submitted pursuant to (a) above. The Department may also prohibit a party that has engaged in such conduct from participating in future CO_2 allowance auctions where the Department determines that the

prior conduct of the party could compromise the integrity of a subsequent CO_2 allowance auction.

(h) A party found by the Department to be qualified to participate in a CO_2 allowance auction will be qualified to participate in subsequent CO_2 allowance auctions, provided that there has been no material change to the information supplied to the Department in the qualification application submitted pursuant to (a) above. If there is any material change to the information in the qualification application submitted pursuant to (a) above, the party's qualification will expire as of the date of such change, pending the submission by the party of a new qualification application pursuant to (a) above and a determination by the Department that the party is qualified to participate in CO_2 allowance auctions.

(i) Prior to each CO_2 allowance auction, a party that intends to participate in the auction shall notify the Department, through a notice of intent to participate, that the party intends to participate in the upcoming CO_2 allowance auction. Such notice shall be submitted to the Department by the same date as that required for submitting a qualification application established in the notice of CO_2 allowance auction for such auction.

(j) As part of a notice of intent to participate submitted to the Department pursuant to (i) above, a qualified party shall notify the Department whether there has been any material change to the information supplied by the qualified party to the Department in the qualification application submitted pursuant to (a) above.

7:27C-5.13 Submission of financial security

(a) In order to participate in any specific CO_2 allowance auction, a qualified party shall provide financial security to the Department, such as a bond, cash, certified funds, or an irrevocable stand-by letter of credit, in a form and manner prescribed by the Department in the notice of CO_2 allowance auction.

(b) Upon receipt and approval by the Department of financial security submitted pursuant to (a) above, the Department will approve the party to participate as a bidder in the specified CO_2 allowance auction.

(c) A party that submits financial security may request return of such financial security at any time prior to or following any CO_2 allowance auction, subject to the following limitations:

1. Any request for the return of financial security prior to the conduct of a CO_2 allowance auction will result in the Department revoking approval to participate in such CO_2 allowance auction, as of the date of such request;

2. The Department will not return such financial security if the Department has any current or pending claim to such financial security as a result of the failure of the bidder to abide by the requirements of N.J.A.C. 7:27C-5.10 through 5.15 or to pay the full amount of any submitted bid when payment is due; and

3. Financial security may be forfeited to the Department in the event the bidder's offer to purchase CO_2 allowances is accepted and the bidder fails to tender payment of the full amount when due.

7:27C-5.14 Bidder limitations

(a) A bidder may only submit a bid or bids in an amount up to the amount of financial security provided to the Department.

(b) No bidder or combination of bidders with related beneficial interests may purchase more than 25 percent of the CO_2 allowances offered for sale in any one CO_2 allowance auction.

7:27C-5.15 Bid submittal requirements

(a) All bids shall be submitted in a form and manner prescribed by the Department, which the Department will make available on the CO_2 allowance auction website, as appropriate.

(b) A bid submitted at a CO_2 allowance auction is a binding offer for the purchase of CO_2 allowances.

7:27C-5.16 Approval of auction results

(a) The Department will approve or disapprove the outcome of a CO_2 allowance auction following the completion of the auction.

(b) The Department will approve or disapprove the results of a CO_2 allowance auction based on an evaluation, in consultation with a market monitor, of whether the auction was conducted in accordance with the proposed procedures and requirements at N.J.A.C. 7:27C-5.5 through 5.15 and whether there was any indication of collusive behavior among auction participants or attempts at market manipulation that impacted the results of the auction.

7:27C-5.17 Award of CO_2 allowances to winning bidders

(a) Following the approval of the results of a CO_2 allowance auction by the Department pursuant to N.J.A.C. 7:27C-5.16 and the settlement of financial transactions by a winning bidder, the Department will award CO_2 allowances to such winning bidder in a number equal to the number of CO_2 allowances represented in winning bids submitted by the bidder.

(b) The Department will allocate CO_2 allowances to the compliance account or general account identified in the qualification application of a winning bidder, in a number equal to the CO_2 allowances awarded to the bidder pursuant to (a) above.

7:27C-5.18 Publication of auction results

Following the approval of an auction by the Department pursuant to N.J.A.C. 7:27C-5.16(a), and no later than 10 days following the allocation of CO_2 allowances to the CO_2 allowance accounts of winning bidders pursuant to N.J.A.C. 7:27C-5.17, the Department will publish on the CO_2 allowance auction website the auction clearing price and the number of CO_2 allowances sold in the auction.

SUBCHAPTER 6. CO_2 ALLOWANCE TRACKING SYSTEM

7:27C-6.1 CO_2 Allowance Tracking System accounts

(a) Consistent with N.J.A.C. 7:27C-6.2(a), the Department will establish one compliance account for each CO_2 budget source. Allocations of CO_2 allowances pursuant to N.J.A.C. 7:27C-5 and 11 and deductions or transfers of CO_2 allowances pursuant to N.J.A.C. 7:27C-4.2, 6.9, or 7 will be recorded in the compliance accounts in accordance with this subchapter.

(b) Consistent with N.J.A.C. 7:27C-6.2(b), the Department will establish, upon request, a general account for any person. Transfers of CO_2 allowances pursuant to N.J.A.C. 7:27C-7 will be recorded in the general account in accordance with this subchapter.

7:27C-6.2 Establishment of a CO_2 Allowance Tracking System account

(a) Upon receipt of a complete account certificate of representation under N.J.A.C. 7:27C-2.4, the Department will establish a compliance account for each CO_2 budget source for which the account certificate of representation was submitted, and will assign a unique identifying number to each such established account.

(b) Upon receipt of a complete application for a general account under N.J.A.C. 7:27C-6.3(b), the Department will establish a general account for the person or persons for whom the application is submitted, and will assign a unique identifying number to each such established account.

(c) Once the Department has established a CO_2 Allowance Tracking System account, all submissions to the Department 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.

7:27C-6.3 Procedures for opening a general account

(a) Any person may apply to open a general account for the purpose of holding and transferring CO_2 allowances by submitting an application for a general account pursuant to (b) below.

(b) A complete application for a general account shall include the following elements in a format prescribed by the Department:

1. The name, address, e-mail address, telephone number, and facsimile transmission number of the CO_2 authorized account representative for the general account and any alternate CO_2 authorized account representative for the general account;

2. At the option of the CO_2 authorized account representative for the general account, the organization name and type of organization;

3. A list of all persons subject to a binding agreement for the CO_2 authorized account representative for the general account or any alternate CO_2 authorized account representative for the general account to represent their ownership interest with respect to the CO_2 allowances held in the general account;

4. The following certification by the CO_2 authorized account representative for the general account and any alternate CO_2 authorized account representative for the general account: "I certify that I was selected as the CO_2 authorized account representative for the general account (or the alternate CO_2 authorized account representative for the general account, 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 a court of competent jurisdiction regarding the general account.";

5. The signature of the CO_2 authorized account representative for the general account and any alternate CO_2 authorized account representative for the general account and the dates signed; and

6. Documents of agreement referred to in the application for a general account, as may be required by the Department.

(c) The Department is under no obligation to review or evaluate the sufficiency of any documents of agreement referred to in the application for a general account.

(d) An application for a general account shall designate one and only one CO_2 authorized account representative and one and only one alternate CO_2 authorized account representative who may act on behalf of the CO_2 authorized account representative. The agreement by which the alternate CO_2 authorized account representative is selected shall include a procedure for authorizing the alternate CO_2 authorized account representative to act in lieu of the CO_2 authorized account representative.

7:27C-6.4 Authorization of the CO_2 authorized account representative for a general account

(a) The CO_2 authorized account representative for a general account and any alternate CO_2 authorized account representative for a 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 CO_2 allowances held in the general account in all matters pertaining to the CO_2 Budget Trading Program, notwithstanding any agreement between the CO_2 authorized account representative for the general account or any alternate CO_2 authorized account representative for the general account and such person. Each such person who has such ownership interest with respect to CO_2 allowances shall be bound by any order or decision issued to the CO_2 authorized account representative for the general account or any alternate CO_2 authorized account representative for the general account by the Department or a court of competent jurisdiction regarding the general account.

(b) Any representation, action, inaction, or submission by any alternate CO_2 authorized account representative shall be deemed to be a representation, action, inaction, or submission by the CO_2 authorized account representative.

(c) Each submission concerning the general account shall be submitted, signed, and certified by the CO_2 authorized account representative for the general account or the alternate CO_2 authorized account representative for the general account. Each such submission shall include the following certification by the CO_2 authorized account representative for the general account or any alternate CO_2 authorized account representative for the general account:

> "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."

(d) The Department will accept or act on a submission concerning the general account only if the submission has been made, signed, and certified in accordance with (c) above.

7:27C-6.5 Changing the CO_2 authorized account representative for a general account and the alternate CO_2 authorized account representative for a general account; changes in ownership interest with respect to CO_2 allowances in a general account

(a) The CO_2 authorized account representative for a general account or the alternate CO_2 authorized account representative for a general account may be changed at any time by submitting a superseding complete application for a general account pursuant to N.J.A.C. 7:27C-6.3(b). The change in the CO_2 authorized account representative for the general account or the alternate CO_2 authorized account representative for the general account is effective upon receipt by the Department of the superseding complete application for a general account. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous CO_2 authorized account representative for the general account or the previous alternate CO_2 authorized account representative for the general account prior to the time and date when the Department receives the superseding application for a general account shall be binding on the new CO_2 authorized account representative for the general account and the new alternate CO_2 authorized account representative for the general account and the persons with an ownership interest with respect to the CO_2 allowances in the general account.

(b) In the event a person with an ownership interest in CO_2 allowances in a general account is not included in the list of such persons in the application for a general account, such 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 CO_2 authorized account representative and any alternate CO_2 authorized account representative, and the decisions, orders, actions, and inactions of the Department, as if the person were included in the list.

(c) 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 of persons, the CO_2 authorized account representative or the alternate CO_2 authorized 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 to reflect the change.

7:27C-6.6 Objections concerning the CO_2 authorized account representative for a general account

(a) Once the Department has received a complete application for a general account under N.J.A.C. 7:27C-6.3(b), the Department will rely on the application, unless and until the Department receives a superseding complete application for a general account under N.J.A.C. 7:27C-6.5(a).

(b) Except as provided at N.J.A.C. 7:27C-6.5(a) or (b), no objection or other communication submitted to the Department concerning the authorization, or any representation, action, inaction, or submission of the CO_2 authorized account representative for the general account, or the alternate CO_2 authorized account representative for the general account, shall affect any representation, action, inaction, or submission of the CO_2 authorized account representative for the general account or the alternate CO_2 authorized account representative for the general account or the finality of any decision or order by the Department under this chapter.

(c) The Department will not decide or otherwise intervene in any dispute concerning the authorization or any representation, action, inaction, or submission of a CO_2 authorized account representative or any alternate CO_2 authorized account representative for a general account, including private legal disputes concerning the proceeds of CO_2 allowance transfers.

7:27C-6.7 Delegation of authority to make electronic submissions by the CO_2 authorized account representative for a general account and the alternate CO_2 authorized account representative for a general account

(a) A CO_2 authorized account representative for a general account or an alternate CO_2 authorized account representative for a general account may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Department under N.J.A.C. 7:27C-7.1 as provided at (b) below.

(b) In order to delegate authority to make an electronic submission to the Department in accordance with (a) above, the CO_2 authorized account representative for a general account or alternate CO_2 authorized account representative for a general account, as appropriate, shall submit to the Department a notice of delegation, in a format prescribed by the Department, that includes the following elements:

1. The name, address, e-mail address, telephone number, and facsimile transmission number of such CO_2 authorized account representative or alternate CO_2 authorized account representative;

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";

3. For each such natural person, a list of the types of electronic submissions under (a) above for which authority is delegated to him or her; and

4. The following certification by the delegating CO_2 authorized account representative for the general account or the delegating alternate CO_2 authorized account representative for the general account, as appropriate:

i. "I agree that any electronic submission to the Department 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 alternate CO_2 authorized account representative, as appropriate,) and before this notice of delegation is superseded by another notice of delegation under N.J.A.C. 7:27C-6.7(b) shall be deemed to be an electronic submission by me."; and

ii. "Until this notice of delegation is superseded by another notice of delegation under N.J.A.C. 7:27C-6.7(b), I agree to maintain an e-mail account and to notify the Department immediately of any change in my e-mail address unless all delegation authority by me under N.J.A.C. 7:27C-6.7(b) is terminated."

(c) A notice of delegation submitted under (b) above shall be effective, with regard to the delegating CO_2 authorized account representative for the general account or the delegating alternate CO_2 authorized account representative for the general account identified in such notice, upon receipt of such notice by the Department and until the Department has received a superseding notice of delegation by such CO_2 authorized account representative or alternate CO_2 authorized account representative, as appropriate. The superseding notice of delegation may replace any previously identified electronic submission agent, add a new electronic submission agent, or eliminate entirely any delegation of authority.

(d) An electronic submission covered by the certification in (b)4 above and made in accordance with a notice of delegation effective under (b) above shall be deemed to be an electronic submission by the CO_2 authorized account representative for the general account or alternate CO_2 authorized account representative for the general account submitting such notice of delegation.

Administrative correction.
See: 41 N.J.R. 1025(b).

7:27C-6.8 Recordation of CO_2 allowance allocations and CO_2 allowance awards

(a) By no later than January 30, 2009, the Department will record in the following accounts the CO_2 allowances for the 2009 through 2018 allocation years:

1. The CO_2 allowances allocated to the consumer benefit account, pursuant to N.J.A.C. 7:27C-5.2(a); and

2. The CO_2 allowances allocated to the voluntary renewable energy account pursuant to N.J.A.C. 7:27C-5.2(c).

(b) When allocating CO_2 allowances to and recording them in an account pursuant to (a) above, the Department 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.

(c) When awarding CO_2 allowances to and recording them in an account pursuant to (d) and (h) below, the Department 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. If the CO_2 allowance is a CO_2 offset allowance, the unique identification number will identify the CO_2 offset allowance as such.

(d) On or before December 31, 2009, the Department will record any early reduction CO_2 allowances awarded to a CO_2 budget source pursuant to N.J.A.C. 7:27C-5.2(q) in the applicable CO_2 budget source's compliance account.

(e) The Department will record any CO_2 allowances allocated to a CO_2 budget source pursuant to N.J.A.C. 7:27C-5.2(j) and (k) in the compliance account of the applicable CO_2 budget source within five business days of such allocation by the Department.

(f) The Department will record any CO_2 allowances allocated to a CO_2 budget source pursuant to N.J.A.C. 7:27C-5.4(b) to the compliance account of the applicable CO_2 budget source within five business days of such allocation by the Department.

(g) The Department will record any CO_2 allowances awarded to a winning bidder in a CO_2 allowance auction pursuant to N.J.A.C. 7:27C-5.17(b) in the compliance account or general account identified by such winning bidder within five business days of such award by the Department.

(h) The Department will record any CO_2 allowances awarded to an offset project sponsor pursuant to N.J.A.C. 7:27C-10.11(a) or (b) in the applicable offset project sponsor's general account within five business days of such award by the Department.

7:27C-6.9 Compliance

(a) CO_2 allowances are available to be deducted in order for a CO_2 budget source to comply with the CO_2 requirements of N.J.A.C. 7:27C-1.4 for a control period, provided that:

1. The CO_2 allowances, other than CO_2 offset allowances, are of allocation years that fall within a prior control period or the same control period for which the allowances will be deducted;

2. The CO_2 allowances are held in the CO_2 budget source's compliance account as of the CO_2 allowance transfer deadline for that control period or are transferred into the compliance account by a CO_2 allowance transfer correctly submitted for recordation under N.J.A.C. 7:27C-7.1 by the CO_2 allowance transfer deadline for that control period;

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 N.J.A.C. 7:27C-1.4 for a 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, as determined in accordance with (a)3i through iii below, and N.J.A.C. 7:27C-8:

i. Unless the provisions of (a)3ii or iii below apply, 3.3 percent;

ii. If the Department determines that there has been a stage-one trigger event, five percent; or

iii. If the Department determines that there has been a stage-two trigger event, 10 percent; and

4. The CO_2 allowances are not necessary for deductions for excess emissions for a prior control period under (e) below.

(b) Following the recordation, in accordance with N.J.A.C. 7:27C-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, the Department will deduct CO_2 allowances available under (a) above to cover the source's CO_2 emissions for the control period, as follows:

1. Until the number of CO_2 allowances deducted equals the number of tons of total CO_2 emissions, less any CO_2 emissions attributable to the burning of eligible biomass, determined in accordance with N.J.A.C. 7:27C-8, from all CO_2 budget units at the CO_2 budget source for the control period; or

2. If there are insufficient CO_2 allowances to complete the deductions at (b)1 above, until there are no more CO_2 allowances remaining in the compliance account that are available to be deducted under (a) above.

(c) The CO_2 authorized account representative for a CO_2 budget source's compliance account may request the deduction of specific CO_2 allowances in the compliance account, identified by serial number, for emissions or excess emissions for a control period in accordance with (b) above or (e) below, as applicable. Such identification shall be made in the compliance certification report pursuant to N.J.A.C. 7:27C-4.1(b)2.

(d) Where there is no identification by the CO_2 authorized account representative, or only partial identification, of available CO_2 allowances by serial number pursuant to N.J.A.C. 7:27C-4.1(b)2, the Department will deduct CO_2 allowances for a control period from the CO_2 budget source's compliance account, in the following order:

1. CO_2 offset allowances, subject to the relevant compliance deduction limitations under (a)3 above, in chronological order (that is, CO_2 offset allowances from earlier allocation years shall be deducted before CO_2 offset allowances from later allocation years). In the event that some, but not all, CO_2 offset allowances from a particular allocation year are to be deducted, CO_2 offset allowances shall be deducted by serial number, with lower serial number allowances deducted before higher serial number allowances; and

2. Any CO_2 allowances, other than CO_2 offset allowances, that are available for deduction under (a) above. CO_2 allowances shall be deducted in chronological order (that is, CO_2 allowances from earlier allocation years shall be deducted before CO_2 allowances from later allocation years). In the event that some, but not all, CO_2 allowances from a particular allocation year are to be deducted, CO_2 allowances shall be deducted by serial number, with lower serial number allowances deducted before higher serial number allowances.

(e) If, after the deduction of CO_2 allowances for compliance in accordance with (b) above, a CO_2 budget source has excess emissions, the Department will deduct from the CO_2 budget source's compliance account a number of CO_2 allowances, from allocation years that occur after the control period in which the CO_2 budget source has excess emissions, equal to three times the number of the CO_2 budget source's excess emissions. In the event that a CO_2 budget source has insufficient CO_2 allowances to cover three times the number of the CO_2 budget source's excess emissions, the CO_2 budget source shall be required to immediately transfer CO_2 allowances into its compliance account in a quantity equal to three times the CO_2 budget source's excess emissions. No CO_2 offset allowances may be deducted to account for the source's excess emissions.

(f) The deduction of any CO_2 allowances required under (e) above will not affect the liability of the owners and operators of the CO_2 budget source or the CO_2 budget units at the CO_2 budget 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.

(g) The Department's determination that a CO_2 budget source had excess emissions and the concomitant deduction of CO_2 allowances from that CO_2 budget source's account may be later challenged in the context of the initial administrative action as set forth at N.J.A.C. 7:27C-1.6, or in the context of 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 from 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:

1. In any instance where the Department's determination of the extent of excess emissions was held to be too low, the Department will take further action under (e) and (f) above to address the expanded violation; and

2. In any instance where the Department's determination of the extent of excess emissions was held to be too high, the Department will distribute to the relevant CO_2 budget source a number of CO_2 allowances equaling the number of CO_2 allowances deducted which are attributable to the difference between the original and final quantity of excess emissions. Should such CO_2 budget source's compliance account no longer exist, the CO_2 allowances will be provided to a general account selected by the owner or operator of the CO_2 budget source from which they were originally deducted.

(h) The Department will record in the appropriate compliance account all deductions from such an account made pursuant to (b) and (e) above.

(i) The Department may review and conduct independent audits concerning any submission under this chapter and make appropriate adjustments of the information in the submissions.

(j) The Department may deduct CO_2 allowances from or transfer CO_2 allowances to a CO_2 budget source's compliance account based on information in the submissions, as adjusted under (i) above.

7:27C-6.10 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 N.J.A.C. 7:27C-4.2, 6.9, 6.11, or 7.

7:27C-6.11 Account error

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

7:27C-6.12 Closing of general accounts

(a) A CO_2 authorized account representative of a general account may instruct the Department to close the account by submitting a statement requesting deletion of the account from the CO_2 Allowance Tracking System and by correctly submitting for recordation under N.J.A.C. 7:27C-7.1 a CO_2 allowance transfer of all CO_2 allowances in the account to one or more other CO_2 Allowance Tracking System accounts.

(b) If a general account shows no activity for a period of six or more years and does not contain any CO_2 allowances, the Department may notify the CO_2 authorized account representative of the account that the account will be closed in the CO_2 Allowance Tracking System 20 business days after the notice is sent. The Department will close the account after the 20-day period, unless before the end of the 20-day period the Department receives a correctly submitted transfer of CO_2 allowances into the account under N.J.A.C. 7:27C-7.1

or a statement submitted by the CO_2 authorized account representative demonstrating to the satisfaction of the Department good cause as to why the account should not be closed.

SUBCHAPTER 7. CO_2 ALLOWANCE TRANSFERS

7:27C-7.1 Submission of CO_2 allowance transfers

(a) A CO_2 authorized account representative seeking recordation of a CO_2 allowance transfer shall submit the transfer to the Department. The transfer shall include the following elements, in a format prescribed by the Department:

1. The numbers identifying both the transferor and transferee accounts;

2. A specification by serial number of each CO_2 allowance to be transferred;

3. The printed name and signature of the CO_2 authorized account representative of the transferor account and the date signed;

4. The date of the completion of the last sale or purchase transaction for the CO_2 allowance, if any; and

5. The purchase or sale price of the CO_2 allowances that are the subject of a sale or purchase transaction under (a)4 above.

7:27C-7.2 Recordation

(a) Within five business days of receiving a CO_2 allowance transfer, except as provided at (b) below, the Department 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:

1. The transfer is submitted in accordance with N.J.A.C. 7:27C-7.1; and

2. The transferor account includes each CO_2 allowance identified by serial number in the transfer.

(b) The Department will not record a CO_2 allowance transfer into or out of a compliance account that is submitted for recordation after the CO_2 allowance transfer deadline that includes any CO_2 allowances of allocation years falling within a control period prior to or the same as the control period to which the CO_2 allowance transfer deadline applies until after completion of the process at N.J.A.C. 7:27C-6.9(b).

(c) The Department will not record a CO_2 allowance transfer submitted for recordation that fails to meet the requirements of (a)1 and 2 above.

7:27C-7.3 Notification

(a) Within five business days of recordation of a CO_2 allowance transfer under N.J.A.C. 7:27C-7.2, the Department will notify each party to the transfer by giving notice to the CO_2 authorized account representatives of both the transferor and transferee accounts.

(b) Within 10 business days of receipt of a CO_2 allowance transfer that fails to meet the requirements of N.J.A.C. 7:27C-7.2(a), the Department will notify the CO_2 authorized account representatives of both accounts subject to the transfer of a decision not to record the transfer and the reasons for such non-recordation.

(c) Nothing in this section shall preclude the submission of a CO_2 allowance transfer for recordation following notification of non-recordation.

SUBCHAPTER 8. MONITORING, RECORDKEEPING AND REPORTING

7:27C-8.1 General requirements

(a) The owner, operator, 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 subchapter and all applicable sections of 40 CFR Part 75 and all Appendices thereto, as specified in this subchapter, which are incorporated by reference herein. Where referenced in this subchapter, the monitoring requirements of 40 CFR Part 75 shall be adhered to in a manner consistent with the purpose of monitoring and reporting CO_2 mass emissions pursuant to this chapter. For purposes of complying with such requirements, the definitions in N.J.A.C. 7:27C-1.2 and in 40 CFR 72.2, as supplemented and amended, and which are incorporated by reference herein, apply, and the terms "affected unit" and "designated representative" in 40 CFR Part 75 are replaced by the terms "CO_2 budget unit" and "CO_2 authorized account representative," respectively. Furthermore, where the term "continuous emissions monitoring system" or "CEMS" is used in 40 CFR Part 75, the definition of that term at N.J.A.C. 7:27C-1.2 applies. For units not subject to an acid rain emissions limitation, the term "Administrator" in 40 CFR Part 75 shall be replaced with the term "the Department."

(b) The owner or operator of a CO_2 budget unit who monitors a non-CO_2 budget unit pursuant to the common, multiple, or bypass stack procedures in 40 CFR 75.16(b)(2)(ii)(B) or 75.72(b)(2)(ii) for the purpose of complying with this subchapter 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 this section through N.J.A.C. 7:27C-8.7.

(c) The owner or operator of each CO_2 budget unit shall:

1. Install all monitoring systems necessary to monitor CO_2 mass emissions in accordance with 40 CFR Part 75, except for equation G-1 of Appendix G, which shall not be used to determine CO_2 emissions. Compliance with this paragraph may require systems to monitor CO_2 concentration, stack gas flow rate, O_2 concentration, heat input, and fuel flow rate;

2. Successfully complete all certification tests required under N.J.A.C. 7:27C-8.2 and meet all other requirements of this subchapter and 40 CFR Part 75, applicable to the monitoring systems installed pursuant to (c)1 above; and

3. Record, report, and quality-assure the data from the monitoring systems required pursuant to (c)1 above.

(d) The owner or operator of a CO_2 budget unit shall meet the monitoring system certification and other requirements of (c) above on or before the following dates, and shall record, report, and quality-assure the data from the monitoring systems under (c)1 above on and after the applicable date, as follows:

1. For the owner or operator of a CO_2 budget unit that commences commercial operation before July 1, 2008, by January 1, 2009;

2. For the owner or operator of a CO_2 budget unit that commences commercial operation on or after July 1, 2008, by the later of the following dates:

i. January 1, 2009; or

ii. The earlier of 90 unit-operating days after the date on which the unit commences commercial operation, or 180 calendar days after the date on which the unit commences commercial operation; and

3. For the owner or operator of a CO_2 budget unit for which construction of a new stack or flue installation is completed after the applicable deadline under (d)1 or 2 above, by the earlier of:

i. Ninety unit-operating days after the date on which emissions first exit to the atmosphere through the new stack or flue; or

ii. One hundred eighty calendar days after the date on which emissions first exit to the atmosphere through the new stack or flue.

(e) Except as provided in (f) below, the owner or operator of a CO_2 budget unit that does not meet the applicable compliance date set forth in (d) above for any monitoring system under (c)1 above shall, for each such monitoring system, determine, record, and report maximum (or, as appropriate, minimum) potential values for CO_2 concentration, CO_2 emissions rate, stack gas moisture content, fuel flow rate, heat input, and any other parameter required to determine CO_2 mass emissions in accordance with 40 CFR 75.31(b)(2) or (c)(3) and section 2.4 of Appendix D of 40 CFR Part 75, as applicable.

(f) The owner or operator of a CO_2 budget unit that does not meet the applicable compliance date set forth in (d)3 above for any monitoring system under (c)1 above shall, for each such monitoring system, determine, record, and report substitute data using the applicable missing data procedures in 40 CFR Part 75, Subpart D, or Appendix D, in lieu of the maximum (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 (d)3 above.

(g) A CO_2 budget unit that is subject to an acid rain emissions limitation or the requirements of the Department's Clean Air Interstate Rule (CAIR) NO_X Trading Program (set forth at N.J.A.C. 7:27-30) and that qualifies for the optional SO_2, NO_X, and CO_2 (for the Acid Rain Program) or NO_X (for the Department's CAIR NO_X Trading Program) emissions calculations for low mass emissions (LME) units under 40 CFR 75.19 and reports emissions for such programs using the calculations under 40 CFR 75.19, shall also use the CO_2 emissions calculations for LME units under 40 CFR 75.19 for purposes of compliance with this chapter.

(h) A CO_2 budget unit that is subject to an acid rain emissions limitation or the requirements of the Department's CAIR NO_X Trading Program (set forth at N.J.A.C. 7:27-30) that does not qualify for the optional SO_2, NO_X, and CO_2 (for the Acid Rain Program) or NO_X (for the Department's CAIR NO_X Trading Program) emissions calculations for LME units under 40 CFR 75.19, shall not use the CO_2 emissions calculations for LME units under 40 CFR 75.19 for purposes of compliance with this chapter.

(i) A CO_2 budget unit that is not subject to an acid rain emissions limitation or the requirements of the Department's CAIR NO_X Trading Program (set forth at N.J.A.C. 7:27-30) shall qualify for the optional CO_2 emissions calculation for LME units under 40 CFR 75.19, provided that it emits less than 100 tons of NO_X annually and no more than 25 tons of SO_2 annually.

(j) No owner or operator of a CO_2 budget unit shall:

1. 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 N.J.A.C. 7:27C-8.6;

2. Operate the CO_2 budget 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 of this subchapter and 40 CFR Part 75;

3. Disrupt the continuous emissions monitoring system, any portion thereof, or any other approved emissions monitoring method, and thereby avoid monitoring and recording CO_2 mass emissions discharged into the atmosphere, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of this subchapter and 40 CFR Part 75; or

4. Retire or permanently discontinue use of the continuous emissions monitoring system, any component thereof, or any other approved emissions monitoring system under this subchapter, except under any of the following circumstances:

i. The owner or operator is monitoring emissions from the unit with another certified monitoring system that has been approved by the Department in accordance with the applicable provisions of this subchapter and 40 CFR Part 75 for use at that unit and that provides emissions data for the same pollutant or parameter as the retired or discontinued monitoring system; or

ii. The CO_2 authorized account representative submits notification of the date of certification testing of a replacement monitoring system in accordance with N.J.A.C. 7:27C-8.2(g).

7:27C-8.2 Initial certification and recertification procedures

(a) The owner or operator of a CO_2 budget unit is exempt from the initial certification, but not the recertification, requirements of this section for a monitoring system installed pursuant to N.J.A.C. 7:27C-8.1(c)1 if the monitoring system:

1. Has been previously certified in accordance with 40 CFR Part 75; and

2. Meets the applicable quality-assurance and quality-control requirements of 40 CFR 75.21 and Appendices B and D of 40 CFR Part 75.

(b) 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 CO_2 emissions rate measured in a common stack or a petition under 40 CFR 75.66 for an alternative requirement in 40 CFR Part 75, the CO_2 authorized account representative shall submit the petition to the Department under N.J.A.C. 7:27C-8.6(a) to determine whether the approval applies under this program.

(c) Except as provided in (a) above, the owner or operator of a CO_2 budget unit shall comply with the initial certification and recertification procedures set forth below at (d) through (*o*) for a continuous emissions monitoring system and an excepted monitoring system under Appendix D of 40 CFR Part 75. The owner or operator of a CO_2 budget 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 Part 75 shall comply with the initial certification and recertification procedures set forth below at (p) or (q), respectively.

(d) The owner or operator of a CO_2 budget unit shall ensure, for each continuous emissions monitoring system required under N.J.A.C. 7:27C-8.1(c)1 (including the automated data acquisition and handling system) the successful completion of all of the initial certification testing required under 40 CFR 75.20 by the applicable deadlines specified in N.J.A.C. 7:27C-8.1(d). In addition, whenever the owner or operator installs a monitoring system in order to meet the requirements of this subchapter in a location where no such monitoring system was previously installed, initial certification in accordance with 40 CFR 75.20 is required.

(e) The owner or operator shall recertify a monitoring system in accordance with 40 CFR 75.20(b) whenever the owner or operator of a CO_2 budget unit makes the following replacement, modification, or changes:

1. A replacement, modification, or change to a certified continuous emissions monitoring system under N.J.A.C. 7:27C-8.1(c)1 that the Administrator or the Department determines significantly affects the ability of the system to accurately measure or record CO_2 mass emissions or heat input or to meet the quality-assurance and quality-control requirements of 40 CFR 75.21 or 40 CFR Part 75, Appendix B; or

2. For a system using stack measurements, such as stack flow, stack moisture content, CO_2 or O_2 monitors, 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. Examples of changes that require recertification include replacement of the analyzer, change in the location or orientation of the sampling probe or site, or changing of flow rate monitor polynomial coefficients.

(f) Subsections (g) through (n) below apply to both initial certification and recertification of a monitoring system under N.J.A.C. 7:27C-8.1(c)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 (o) below.

(g) The CO_2 authorized account representative shall submit to the Department and the Administrator a written notice of the dates of certification in accordance with N.J.A.C. 7:27C-8.4.

(h) The CO_2 authorized account representative shall submit to the Department a certification application for each monitoring system. A complete certification application shall include the information specified in 40 CFR 75.63.

(i) 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 CO_2 Budget Trading Program for a period not to exceed 120 days after the Department receives the complete certification application for the monitoring system or component thereof under (h) above. Data measured and recorded by the provisionally certified monitoring system or component thereof, in accordance with the requirements of 40 CFR Part 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.

(j) 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 (h) above. 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 Part 75 and is included in the certification application will be deemed certified for use under the CO_2 Budget Trading Program.

(k) If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of 40 CFR Part 75, then the Department will issue a written notice of approval of the certification application within 120 days of receipt.

(*l*) 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 CO_2 authorized account representative shall submit the additional information required to complete the certification application. If the CO_2 authorized account representative does not comply with the notice of incompleteness by the specified date, then the Department may disapprove the application and issue a notice of disapproval under (m) below. The 120-day review period specified at (j) above shall not begin before receipt of a complete certification application.

(m) If the certification application shows that any monitoring system or component thereof does not meet the performance requirements of 40 CFR Part 75, or if the certification application is incomplete and the Department disapproves the application pursuant to (*l*) above, then the Department will issue a written notice of disapproval of the certification application. The issuance of such notice of disapproval invalidates the provisional certification, 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 (*o*) below, for each monitoring system, or component thereof, that the Department has disapproved for initial certification.

(n) The Department will conform with the requirements at N.J.A.C. 7:27C-8.3(b) in issuing a notice of disapproval of the certification status of a monitor.

(*o*) If the Department issues a notice of disapproval of a certification application under (m) above or a notice of disapproval of certification status under (n) above, then:

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 75.20(g)(7):

   i. For a unit using or intending to monitor for CO_2 mass emissions using heat input, or for a unit using the low mass emissions excepted methodology under 40 CFR 75.19, as supplemented and amended and which is incorporated by reference herein, the maximum potential hourly heat input of the unit; or

   ii. For a unit 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 Part 75, as supplemented and amended and which is incorporated by reference herein;

2. The CO_2 authorized account representative shall submit a notification of certification retest dates and a new certification application in accordance with (g) and (h) above; and

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.

(p) The owner or operator of a unit qualified to use the low mass emissions excepted methodology under N.J.A.C. 7:27C-8.1(g) shall meet the applicable certification and recertification requirements of 40 CFR 75.19(a)(2) and 75.20(h) and N.J.A.C. 7:27C-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).

(q) The CO_2 authorized account representative of each unit for which the owner or operator intends to use an alternative monitoring system approved by the Administrator and, if applicable, by the Department, under Subpart E of 40 CFR Part 75, shall comply with the applicable notification and application procedures of 40 CFR 75.20(f).

7:27C-8.3 Out-of-control periods

(a) Whenever any monitoring system fails to meet the quality assurance and quality control requirements or data validation requirements of 40 CFR Part 75, data shall be substituted using the applicable procedures in Subpart D or Appendix D, of 40 CFR Part 75.

(b) 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 N.J.A.C. 7:27C-8.2 or the applicable provisions of 40 CFR Part 75, both at the time of the initial certification or recertification application submission and at the time of the audit, the Department or the Administrator will issue a notice of disapproval of the certification status of such monitoring system. An audit will be either a field audit or an audit of any information submitted to the Department or the Administrator. By issuing the notice of disapproval, the Department or Administrator revokes prospectively the certification status of the monitoring system. The data measured and recorded by the monitoring system shall not be considered valid quality-assured data from the date of issuance of the notification of the revoked certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests for the monitoring system. The owner or operator shall follow the initial certification or recertification procedures in N.J.A.C. 7:27C-8.2 for each disapproved monitoring system.

7:27C-8.4 Notifications

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

7:27C-8.5 Recordkeeping and reporting

(a) In addition to the requirements of N.J.A.C. 7:27C-2.1(e) and the recordkeeping and reporting requirements in this section, the CO_2 authorized account representative shall comply with all applicable recordkeeping and reporting requirements under 40 CFR 75.73.

(b) The owner or operator of a CO_2 budget unit shall submit a monitoring plan in the manner prescribed in 40 CFR 75.62.

(c) The CO_2 authorized account representative shall submit a certification or recertification application to the Department within 45 days after completing all CO_2 monitoring system initial certification or recertification tests required under N.J.A.C. 7:27C-8.2 including the information required under 40 CFR 75.53(g) and (h) and 75.63.

(d) The CO_2 authorized account representative shall submit quarterly reports, as follows:

1. The CO_2 authorized account representative shall report the CO_2 mass emissions data for the CO_2 budget unit, in an electronic format prescribed by the Administrator, unless otherwise prescribed by the Department, for each calendar quarter beginning with:

   i. For a unit that commences commercial operation before July 1, 2008, the calendar quarter beginning January 1, 2009; or

   ii. 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 N.J.A.C. 7:27C-8.1(d). If the calendar quarter so determined is the third or fourth quarter of 2008, reporting shall commence in the quarter beginning January 1, 2009;

2. The CO_2 authorized account representative shall submit each quarterly report to the Department 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 Part 75 and 40 CFR 75.64. Quarterly reports shall be submitted for each CO_2 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 Part 75, except for opacity, NO_X and SO_2 provisions; and

3. The CO_2 authorized account representative shall submit to the Department a compliance certification in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. In addition, the CO_2 authorized account representative shall certify:

   i. The monitoring data submitted were recorded in accordance with the applicable requirements of this chapter and 40 CFR Part 75, including the quality assurance procedures and specifications;

   ii. For a unit with add-on CO_2 emissions controls and for all hours where data are substituted in accordance with 40 CFR 75.34(a)(1), 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 Part 75 and the substitute values do not systematically underestimate CO_2 emissions; and

   iii. The CO_2 concentration values substituted for missing data under Subpart D of 40 CFR Part 75 do not systematically underestimate CO_2 emissions.

7:27C-8.6 Petitions

(a) Except as provided in (c) below, the CO_2 authorized account representative of a CO_2 budget unit that is subject to an acid rain emissions limitation may submit a petition to the

Administrator under 40 CFR 75.66, as supplemented and amended and which is incorporated by reference herein, and to the Department requesting approval to apply an alternative to any requirement of 40 CFR Part 75. Application of an alternative to any requirement of 40 CFR Part 75 is in accordance with this subchapter only to the extent that the petition is approved in writing by the Administrator and subsequently approved in writing by the Department.

(b) The CO_2 authorized account representative of a CO_2 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 Part 75. Application of an alternative to any requirement of 40 CFR Part 75 is in accordance with this subchapter only to the extent that the petition is approved in writing by the Administrator and subsequently approved in writing by the Department.

(c) The CO_2 authorized account representative of a CO_2 budget unit that is subject to an acid rain emissions limitation may submit a petition to the Administrator under 40 CFR 75.66, as supplemented and amended and which is incorporated by reference herein, 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 CO_2 concentration CEMS used under 40 CFR 75.71(a)(2). Application of an alternative to any such requirement is in accordance with this subchapter only to the extent the petition is approved in writing by the Administrator and subsequently approved in writing by the Department.

7:27C-8.7 CO_2 budget units that co-fire eligible biomass

(a) The CO_2 authorized account representative of a CO_2 budget unit that co-fires eligible biomass as a compliance mechanism under this chapter shall report the following information to the Department for each calendar quarter:

1. For each shipment of solid eligible biomass fuel fired at the CO_2 budget unit:

   i. The total eligible biomass fuel input, on an as-fired basis, in pounds; and

   ii. The moisture content, on an as-fired basis, as a fraction by weight;

2. For each distinct type of gaseous eligible biomass fuel fired at the CO_2 budget unit:

   i. The density of the biogas, on an as-fired basis, in pounds per standard cubic foot;

   ii. The moisture content of the biogas, on an as-fired basis, as a fraction by weight; and

   iii. The total eligible biomass fuel input, in standard cubic feet;

3. For each distinct type of eligible biomass fuel fired at the CO_2 budget unit:

   i. The dry basis carbon content of the fuel type, as a fraction by dry weight;

   ii. The dry basis higher heating value, in MMBtu per dry pound;

   iii. The total dry basis eligible biomass fuel input, in pounds, calculated in accordance with (b) below;

   iv. The total eligible biomass fuel heat input, in MMBtu, calculated in accordance with (d)1 below; and

   v. A chemical analysis, including heating value and carbon content;

4. The total heat input to the CO_2 budget unit due to firing eligible biomass fuel, in MMBtu, calculated in accordance with (d)(2) below;

5. A description and documentation of the monitoring technology employed, and a description and documentation of the fuel sampling methodology employed, including sampling frequency; and

6. The total CO_2 emitted from the CO_2 budget unit due to firing eligible biomass fuel, in tons, calculated in accordance with (c) below.

(b) An owner or operator of a CO_2 budget unit shall calculate and submit to the Department on a quarterly basis the total dry weight for each distinct type of eligible biomass fired by the CO_2 budget unit during the reporting quarter. The total dry weight shall be determined for each fuel type as follows:

1. For solid fuel types:

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

where:

F_j = 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

n = number of shipments; and

2. For gaseous fuel types:

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

where:

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

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

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

M_j = Moisture content (fraction) for fuel type j; and

j = fuel type.

(c) CO_2 emissions due to firing of eligible biomass shall be determined as follows:

1. For any full calendar quarter during which no fuel other than eligible biomass is fired at the CO_2 budget unit, as measured and recorded in accordance with N.J.A.C. 7:27C-8.1 through 8.6; or

2. For any full calendar quarter during which fuels other than eligible biomass are fired at the CO_2 budget unit, as determined using the following equation:

$$CO_2 \text{ tons} = \sum_{j=1}^{n} F_j \times C_j \times O_j \times 44/12 \times 0.0005$$

where:

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

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

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

O_j = Oxidation factor for eligible biomass fuel type j, derived for solid fuels based on the ash content of the eligible biomass fired and the carbon content of this ash, as determined pursuant to (a)13 above; 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;

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

j = fuel type; and

n = number of distinct fuel types.

(d) Heat input due to firing of eligible biomass for each quarter shall be determined as follows:

1. For each distinct fuel type:

$$H_j = F_j \times HHV_j$$

where:

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

F_j = Total eligible biomass dry basis fuel input (lbs) for fuel type j, as calculated at (b) above;

HHV_j = Higher heating value (MMBtu/lb), dry basis, for fuel type j, as determined through chemical analysis pursuant to (a)13 above;

j = fuel type; and

2. For all fuel types:

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

where:

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

j = fuel type; and

n = number of distinct fuel types.

(e) Fuel sampling methods and fuel sampling technology shall be consistent with the New York State Renewable Portfolio Standard Biomass Guidebook, May 2006, as supplemented and amended and which is incorporated by reference herein. A copy may be obtained from the New York State Energy Research and Development Authority's website at http://www.nyserda.org/rps/RPS_Biomass_Guide.pdf.

7:27C-8.8 Additional requirements to provide output data

(a) A CO_2 budget source shall report net electric output and net thermal output to the Department pursuant to (b) through (i) below.

(b) A CO_2 budget unit that participates in a wholesale electricity market administered by PJM or NYISO shall submit to the Department the same megawatt-hour value submitted to PJM or NYISO to document megawatt-hours of electrical output and a statement certifying that the megawatt-hours of electrical output reported reflects the total actual electrical output for the CO_2 budget unit used by PJM or NYISO to determine settlement of transactions among wholesale electricity market participants.

(c) A CO_2 budget unit that does not participate in a wholesale electricity market administered by PJM or NYISO shall report net electrical output in accordance with an output monitoring plan approved by the Department pursuant to (e) below.

(d) A CO_2 budget source that sells steam shall use billing meters to determine and report net steam output. A CO_2 budget source for which steam output is not measured by billing meters or for which steam output is combined with output from a non-CO_2 budget unit prior to measurement by the billing meter shall report net steam output in accordance with an output monitoring plan approved by the Department pursuant to (e) below. If data for steam output is not available, the CO_2 budget source shall report heat input providing useful steam output as a surrogate for steam output in accordance with an output monitoring plan approved by the Department pursuant to (e) below.

(e) Each CO_2 budget source shall submit to the Department for approval an output monitoring plan that includes a diagram and description as stated below:

1. A diagram of the electrical and/or steam system, as applicable, for which output is being monitored, as follows:

i. For monitoring net electric output, the diagram must contain all CO_2 budget units and all electric generators served by each CO_2 budget unit and the relationship between CO_2 budget units and electric generators. If an electric generator served by a CO_2 budget unit is also served by a non-affected unit, the non-affected unit and its relationship to each electric generator shall be indicated on the diagram as well. The diagram shall indicate where the net electric output is measured and include all electrical inputs and outputs to and from the facility. If net electric output is determined using a billing meter, the diagram shall show each billing meter used to determine net sales of electricity and show that all electricity measured at the point of sale is generated by the CO_2 budget unit; or

ii. For monitoring net thermal output, the diagram must include all steam or hot water coming into the net steam system, including steam from CO_2 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 must have an estimated temperature, pressure, and phase indicator, and an enthalpy in Btu/lb. The diagram of the net steam system must identify all steam loads, including, but not limited to, useful loads, house loads, parasitic loads, and all boiler feedwater returns. The diagram must represent all energy losses in the system as either usable or unusable losses. The diagram must 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 shall show the monitoring equipment used to determine the sales of steam;

2. A description of each output monitoring system. The description of the output monitoring system must 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 must be included;

3. A detailed description of all quality assurance and quality control activities that will be performed to maintain the output system in accordance with (g) below; and

4. 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.

(f) The CO_2 authorized account representative for the CO_2 budget source shall submit a certification, which may be submitted with the certification application required under N.J.A.C. 7:27C-8.5(d), stating that the output monitoring system either consists entirely of billing meters or meets one of the accuracy requirements for non-billing meters at (f)2 below. The certification shall state that the monitoring system meets the following requirements, as applicable:

1. The billing meter must record the electric or thermal output. Any electric or thermal output values that the CO_2 budget source 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; or

2. For non-billing meters, the output monitoring system must either meet an accuracy of within 10.0 percent of the reference value (a system approach to accuracy), or each component monitor for the output system must meet an accuracy of within 3.0 percent of the full scale value (a component approach to accuracy), whichever is less stringent, as follows:

i. The system approach to accuracy must include a determination of how the system accuracy of 10.0 percent is achieved using the individual components in the system and include data loggers and any wattmeters used to calculate the final net electric output data and/or any flowmeters for steam or condensate, temperature measurement devices, absolute pressure measurement devices, and differential pressure devices used for measuring thermal energy; or

ii. If testing a piece of output measurement equipment pursuant to the component approach to accuracy shows that the output readings are not accurate to within 3.0 percent of the full scale value, then the equipment shall be repaired or replaced to meet that requirement.

(g) Ongoing quality assurance and quality control (QA/QC) activities shall be performed in order to maintain the output system in accordance with the following:

1. Where billing meters are used to determine output, no QA/QC activities beyond what are already performed are required;

2. Where non-billing meters are used to determine output, 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 shall be periodically retested. For other types of equipment, recalibration or reverification of the meter accuracy shall be performed at least once every two years (that is, at least once every eight calendar quarters), unless a consensus standard, approved by the Department as part of an output monitoring plan at (e) above, allows for less frequent

calibrations or accuracy tests. For non-billing meters, the output monitoring system must either meet an accuracy of within 10.0 percent of the reference value, or each component monitor for the output system must meet an accuracy of within 3.0 percent 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 shall be repaired or replaced to meet that requirement; and

3. If testing a piece of output measurement equipment shows that the output readings are not accurate to the certification value at (f)2 above, as applicable, 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 output monitoring plan required under (e) above.

(h) The owner or operator of a CO_2 budget source shall retain data used to monitor, determine, or calculate net electrical output and net thermal output for 10 years.

(i) The CO_2 authorized account representative shall submit annual output reports, as follows:

1. The annual output report shall be submitted to the Department electronically, by the March 1 following the immediately preceding calendar year;

2. The annual output report shall also be submitted, upon request by the Department, in hardcopy;

3. The annual output report shall include unit level megawatt-hours and all useful steam output; and

4. The annual output report shall include a certification from the CO_2 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 source or CO_2 budget units at the CO_2 budget source 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."

SUBCHAPTER 9. (RESERVED)

SUBCHAPTER 10. CO_2 EMISSIONS OFFSET PROJECTS

7:27C-10.1 Purpose

The Department will provide for the award of CO_2 offset allowances to sponsors of CO_2 emissions offset projects or CO_2 emissions credit retirements that have reduced or avoided atmospheric loading of CO_2, CO_2 equivalent, or sequestered carbon as demonstrated in accordance with the applicable provisions of this subchapter. The requirements of this subchapter are designed to ensure that CO_2 offset allowances awarded represent CO_2-equivalent emission reductions, avoided CO_2-equivalent emissions, or carbon sequestration that is real, additional, verifiable, enforceable, and permanent within the framework of a standards-based approach. Subject to the relevant compliance deduction limitations at N.J.A.C. 7:27C-6.9(a)3, any CO_2 budget source may use CO_2 offset allowances for compliance purposes.

7:27C-10.2 Definitions

The following words and terms, when used in this subchapter, have the following meanings, unless the context clearly indicates otherwise.

"Accredited independent verifier" means an independent verifier who has been accredited by the Department pursuant to N.J.A.C. 7:27C-10.10.

"Afforestation" means the direct human-induced conversion of land from a non-forested state to a forested state.

"AFUE" means annual fuel utilization efficiency, which is a measure of heating efficiency on an annual basis, based on the heat transferred to the conditioned space divided by the fuel energy supplied, as determined pursuant to U.S. Department of Energy testing procedures specified at 10 CFR Part 430, Subpart B, Appendix N, incorporated by reference herein.

"Allocation period" means the number of years for which an offset project that has received a consistency determination pursuant to N.J.A.C. 7:27C-10.4(i) is qualified for the award of CO_2 offset allowances pursuant to N.J.A.C. 7:27C-10.11(a).

"Animal unit" means a unit for measuring animal inventories, where one animal unit is equal to 1,400 pounds of animal live weight.

"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 that includes a methane recovery system.

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

"Anaerobic storage" means the storage of organic material in an oxygen-free environment, or under oxygen-free conditions, including, but not limited to, holding tanks, ponds, and lagoons.

"ANSI" means the American National Standards Institute.

"ANSI/ASHRAE/IESNA Standard 90.1-2007" means ANSI/ASHRAE/IESNA Standard 90.1-2007: Energy Standard for Buildings Except Low-Rise Residential Buildings, I-P Edition, as supplemented and amended and incorporated by reference herein, which is available from the American Society of Heating, Refrigerating and Air-Conditioner Engineers at http://www.ashrae.org.

"ASHRAE" means the American Society of Heating, Refrigerating and Air-Conditioner Engineers.

"ASHRAE Guideline 14-2002" means ASHRAE Guideline 14-2002, Measurement of Energy and Demand Savings, as supplemented and amended and incorporated by reference herein, which is available from the American Society of Heating, Refrigerating and Air-Conditioner Engineers at http://www.ashrae.org.

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

"Boiler (commercial)" means a self-contained, low-pressure appliance for supplying steam or hot water to a commercial building.

"Boiler (residential)" means a self-contained, low-pressure appliance for supplying steam or hot water to a residential building.

"Building envelope" means the elements of a building that separate conditioned space from unconditioned space, or that enclose semi-heated space, through which thermal energy may be transferred to or from the exterior, unconditioned space, or conditioned space. Building envelope includes all elements that separate the interior of a building from the outdoor environment, including walls, windows, foundation, basement slab, ceiling, roof, and insulation.

"Carbon pool" means a reservoir that has the ability to accumulate and store carbon.

"Carbon stock" means the quantity of carbon in a carbon pool.

"CO_2e" means carbon dioxide equivalent.

"CO_2 emissions credit retirement" means the permanent retirement of greenhouse gas allowances or credits issued pursuant to any governmental mandatory carbon-constraining program outside the United States that places a specific tonnage limit on greenhouse gas emissions, provided the allowances or credits are acceptable and valid for use in that program at the time of the filing of the consistency application under N.J.A.C. 7:27C-10.4, or certified greenhouse gas emissions reduction credits issued pursuant to the United Nations Framework Convention on Climate Change (UNFCCC) or protocols adopted through the UNFCCC process.

"Commercial building" means a building to which the provisions of ANSI/ASHRAE/IESNA Standard 90.1 apply, which includes buildings other than low-rise residential buildings.

"Condensing mode" means the design and operation of furnaces or boilers in a mode that leads to the production of condensate in flue gases.

"Cooperating regulatory agency" means a regulatory agency in a state or United States jurisdiction, other than 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 to report violations of this subchapter to the Department.

"Energy conservation measure" or "ECM" or "energy efficiency measure" or "EEM" means a set of activities designed to increase the energy efficiency of a building or improve the management of energy demand. An ECM/EEM may involve, but is not limited to, one or more of the following: physical changes to facility equipment, modifications to a building, revisions to operating and maintenance procedures, software changes, or new means of training or managing users of the building or operations and maintenance staff.

"Energy factor" means the efficiency ratio of the energy supplied in heated water divided by the energy input to the water heater, as determined pursuant to U.S. Department of Energy testing procedures specified at 10 CFR Part 430, Subpart B, Appendix E, incorporated by reference herein.

"Energy performance" means a measure of the relative energy efficiency of a building, building equipment, or building components, as measured by the amount of energy required to provide building services. For building equipment and components, "energy performance" means a relative measure of the impact of equipment or components on building energy usage.

"Energy services" means services provided to building occupants, such as heating and hot water, cooling, and lighting, which entail the use of energy.

"Forested condition" means a condition whereby land:

1. Is at least 1.0 acre in size and 120.0 feet wide measured stem-to-stem from the outer-most edge. Forested strips must be 120.0 feet wide for a continuous length of at least 363.0 feet in order to meet the acre threshold; and

2. Meets at least one of the two following stocking criteria:

i. The land is at least 10 percent stocked by trees of any size or has been at least 10 percent stocked in the past, and is not subject to non-forest use(s) that prevent normal tree regeneration and succession such as regular mowing, intensive grazing, or recreation activities; or

ii. In the case of several western woodland species where stocking cannot be determined, the land has at least five percent crown cover by trees of any size, or has had at least five percent crown cover in the past, and the condition is not subject to non-forest use that prevents normal tree regeneration and succession such as regular mowing, chaining, or recreation activities.

"Furnace (residential)" means a self-contained, indirect-fired appliance that supplies heated air to a residential or commercial building through ducts to conditioned spaces and that has a heat input rate of less than 225,000 Btu/hr.

"HVAC system" means a system or systems that provide, either collectively or individually, heating, ventilation, or air conditioning to a building, including the equipment, distribution network, and terminals.

"IESNA" means the Illuminating Engineering Society of North America.

"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.

"New building" means a newly constructed building designed to replace an existing building on an offset project site, or a newly constructed building designed to be a zero net energy building.

"Non-census water" means streams, sloughs, estuaries, and canals more than 120 feet and less than one-eighth of a mile (680 feet) wide and lakes, reservoirs, and ponds up to and including 40 acres in size.

"Non-forested condition" means a condition whereby land does not meet the definition of "forested condition." Non-forested land includes areas used for crops, improved pasture, residential areas, city parks, improved roads of any width and adjoining rights-of-way, power line clearings of any width, and non-census water. If intermingled in forest areas, unimproved roads and non-forest strips must be more than 120.0 feet wide, and clearings more than one acre in size, to qualify as non-forested land.

"Offset project" means all equipment, materials, items, or actions directly related to the reduction of CO_2 equivalent emissions, avoidance of CO_2-equivalent emissions, or the sequestration of carbon specified in a consistency application submitted pursuant to N.J.A.C. 7:27C-10.4. Equipment, materials, items, or actions unrelated to an offset project reduction of CO_2 equivalent emissions, avoidance 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, except as set forth at N.J.A.C. 7:27C-10.5 through 10.9.

"On-site combustion" means the combustion of fossil fuel at a building to provide building services, such as heating, hot water, or electricity.

"Passive solar" means a combination of building design features and building components that utilize solar energy to reduce or eliminate the need for mechanical heating and cooling and daytime artificial lighting.

"Permanent retirement" means, for a CO_2 emissions credit retirement, the placement of a greenhouse gas allowance or credit in a retirement account controlled by the jurisdiction that generated the allowance or credit, or in an allowance retirement account controlled by the Department, or the determination by the Department that the greenhouse gas allowance or credit has otherwise been rendered unusable.

"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, "project commencement" means the date on which such activity is first implemented or such protocol is first utilized.

"Project sponsor" means the sponsor of an offset project or CO_2 emissions credit retirement under this subchapter.

"Regional-type anaerobic digester" means an anaerobic digester that uses feedstock from more than one agricultural operation, or that imports feedstock from more than one agricultural operation. A regional-type anaerobic digester is 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.

"Residential building" means a low-rise residential building to which the provisions of ANSI/ASHRAE/IESNA Standard 90.1 do not apply, including single family homes, multi-

family structures of three stories or fewer above grade, and manufactured homes (modular and mobile).

"Residential Energy Services Network" or "RESNET" means an industry not-for-profit membership corporation that acts as a national standards-making body for building energy efficiency rating systems.

"SF_6-containing operating equipment" means any equipment used for the transmission and distribution of electricity that contains sulfur hexafluoride (SF_6).

"System benefit fund" means any fund made up of revenue collected directly from retail electricity or natural gas ratepayers through retail energy bills.

"Total solids" means the total of all solids in a sample, including 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. "Transmission and/or distribution entity" 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.

"Verification" means the confirmation by an accredited 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 of this subchapter.

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

"Whole-building energy performance" means the overall energy performance of a building, taking into account the integrated impact on energy usage of all building components and systems.

"Whole-building retrofit" means any building project that involves the replacement of more than one building system, or set of building components, and that also requires a building permit.

"Zero net energy building" means a building designed to produce as much energy, using renewable energy sources, as the building is projected to use, as measured on an annual basis.

7:27C-10.3 General requirements

(a) Any of the following types of offset projects are eligible for the award of CO_2 offset allowances, provided they have otherwise satisfied all the applicable requirements of this subchapter:

1. Landfill methane capture and destruction;

2. Reduction in emissions of sulfur hexafluoride (SF_6);

3. Sequestration of carbon due to afforestation;

4. Reduction or avoidance of CO_2 emissions from natural gas, oil, or propane end-use combustion due to end-use energy efficiency; and

5. Avoided methane emissions from agricultural manure management operations.

(b) To qualify for the award of CO_2 offset allowances, an offset project must be located:

1. In New Jersey;

2. Partly in New Jersey and partly in one or more other participating states, provided that more of the CO_2-equivalent emissions reduction, avoided CO_2-equivalent emissions or carbon sequestration due to the offset project is projected to occur in New Jersey than in any other participating state; or

3. 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 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 to report violations of this subchapter.

(c) To qualify for the award of CO_2 offset allowances, the sponsor of a CO_2 emissions credit retirement shall satisfy all the applicable requirements of this subchapter.

(d) The Department will only award CO_2 offset allowances for CO_2 emissions credit retirements after the occurrence of a stage-two trigger event.

(e) Any person meeting the requirements of N.J.A.C. 7:27C-10.4 may act as the sponsor of an eligible CO_2 emissions offset project or offset project credit retirement.

(f) Except as provided at N.J.A.C. 7:27C-10.5 through 10.9, the Department will not award CO_2 offset allowances to:

1. An offset project or CO_2 emissions credit retirement that is required pursuant to any local, state or Federal law, regulation, or administrative or judicial order. If an offset project has been issued a consistency determination under N.J.A.C. 7:27C-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 CO_2 offset allowances until the end of its current allocation period, described at (g) and (h) below, but its eligibility shall not be extended for an additional allocation period;

2. 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 CO_2 offset allowances awarded under N.J.A.C. 7:27C-10.11) 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;

3. An offset project that receives funding or other incentives from any system benefit fund, or funds, or other incentives provided through revenue from the auction or sale of CO_2 allowances in the consumer benefit account pursuant to N.J.A.C. 7:27C-5.4(a) or (b); and

4. An offset project or CO_2 emissions credit retirement that is awarded credits or allowances under any other mandatory or voluntary greenhouse gas program.

(g) Except as provided in (h) below, the Department will award CO_2 offset allowances under N.J.A.C. 7:27C-10.11 for an initial 10-year allocation period. At the end of the initial 10-year allocation period, the Department will award CO_2 offset allowances under N.J.A.C. 7:27C-10.11 for a second 10-year allocation period, provided the offset sponsor has submitted a consistency application pursuant to N.J.A.C. 7:27C-10.4 prior to the expiration of the initial allocation period, and the Department has issued a consistency determination pursuant to N.J.A.C. 7:27C-10.4(i).

(h) The Department will award CO_2 offset allowances under N.J.A.C. 7:27C-10.11 for an afforestation offset project for an initial 20-year allocation period. At the end of the initial 20-year allocation period, the Department will award CO_2 offset allowances under N.J.A.C. 7:27C-10.11 for a second 20-year allocation period, provided the offset sponsor has submitted a consistency application for the afforestation offset project pursuant to N.J.A.C. 7:27C-10.4 prior to the expiration of the initial allocation period, and the Department has issued a consistency determination pursuant to N.J.A.C. 7:27C-10.4(i). At the end of the second 20-year allocation period, the Department will award CO_2 offset allowances under N.J.A.C. 7:27C-10.11 for a third 20-year allocation period, provided the offset sponsor has submitted a consistency application for the afforestation offset project pursuant to N.J.A.C. 7:27C-10.4 prior to the expiration of the second allocation period, and the Department has issued a consistency determination pursuant to N.J.A.C. 7:27C-10.4(i). In no event will the Department award CO_2 offset allowances under N.J.A.C. 7:27C-10.11 to an afforestation offset project for more than a total of 60 allocation years.

(i) The Department will award CO_2 offset allowances under N.J.A.C. 7:27C-10.11 only for offset projects that are initially commenced on or after December 20, 2005.

(j) A project sponsor shall provide the Department, in writing, an access agreement granting the Department access to the physical location of the offset project to inspect for compliance with this subchapter. For an offset project located in a state or United States jurisdiction that is not a participating state, the project sponsor shall also provide the Department, in writing, an access agreement granting the cooperating regulatory agency access to the physical location of the offset project to inspect for compliance with this subchapter.

(k) If at any time the Department determines that a project sponsor has not complied with the requirements of this subchapter, the Department may revoke and retire any and all CO_2 offset allowances in the project sponsor's account. If at any time the Department determines that an offset project does not comply with the requirements of this subchapter, then the Department may revoke any approvals it has issued relative to the offset project.

7:27C-10.4 Consistency application process

(a) The sponsor of an offset project or CO_2 emissions credit retirement shall establish a general account under N.J.A.C. 7:27C-6.2(b).

(b) All submissions to the Department required for the award of CO_2 offset allowances under this subchapter shall be from the CO_2 authorized account representative for the general account of the sponsor of the relevant offset project or CO_2 emissions credit retirement.

(c) A consistency application for an offset project must be submitted, in a format prescribed by the Department, and consistent with the requirements of this section, by the following deadlines:

1. For an offset project commenced prior to January 1, 2009, by June 30, 2009; and

2. For an offset project commenced on or after January 1, 2009, by the date that is 180 days after the commencement of the offset project.

(d) The Department will deny any consistency application that fails to meet the deadlines of (c) above.

(e) A consistency application for an offset project shall include:

1. The project sponsor's name, address, e-mail address, telephone number, facsimile transmission number, and account number;

2. The offset project description, as required by the relevant provisions of N.J.A.C. 7:27C-10.5 through 10.9;

3. A demonstration that the offset project meets all applicable requirements of this subchapter;

4. The emissions baseline determination as required by the relevant provisions of N.J.A.C. 7:27C-10.5 through 10.9;

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 N.J.A.C. 7:27C-10.5 through 10.9;

6. A completed consistency application agreement signed by the project sponsor that reads as follows: "I, the undersigned project sponsor (name) recognize and accept 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 N.J.A.C. 7:27C-10. I, the undersigned project sponsor, hereby certify that I hold the legal rights to the offset project, or have 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 N.J.A.C. 7:27C-10 is contingent on meeting the requirements of N.J.A.C. 7:27C-10. I authorize the Department 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 includes the right to enter the physical location of the offset project. With regard to any legal dispute under this subchapter, I submit to the jurisdiction of the State of New Jersey and all such disputes will be subject to applicable New Jersey law.";

7. A statement and certification report signed by the offset project sponsor certifying that all offset projects for which the sponsor has received CO_2 offset allowances under this subchapter (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 CO_2 Budget Trading Program in all participating states;

8. A verification report and certification signed by an accredited independent verifier that expresses that the accredited independent verifier has reviewed the entire application and evaluated the following in relation to the applicable requirements at N.J.A.C. 7:27C-10.3 and 10.5 through 10.9, and any applicable guidance issued by the Department:

i. The adequacy and validity of information supplied by the project sponsor to demonstrate that the offset project meets the applicable requirements of N.J.A.C. 7:27C-10.3, and 10.5 through 10.9;

ii. The adequacy and validity of information supplied by the project sponsor to demonstrate baseline emissions pursuant to the applicable requirements at N.J.A.C. 7:27C-10.5 through 10.9;

iii. The adequacy of the monitoring and verification plan submitted pursuant to the applicable requirements at N.J.A.C. 7:27C-10.5 through 10.9; and

iv. Such other evaluations and statements as may be required by the Department to fully review whether the offset project meets the applicable requirements of N.J.A.C. 7:27C-10;

9. Disclosure of any voluntary or mandatory programs, other than the CO_2 Budget Trading Program, pursuant to which greenhouse gas emissions data related to the offset project has been, or will be reported; and

10. For an offset project 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.

(f) A consistency application for a CO_2 emissions credit retirement shall be submitted in a format prescribed by the Department and shall include sufficient information to demonstrate that the CO_2 emissions credit is eligible pursuant to N.J.A.C. 7:27C-10.3(f), was lawfully held by the project sponsor, and has been permanently and irrevocably retired.

(g) The Department will not accept as submitted a consistency application for an offset project or CO_2 emissions credit retirement if:

1. 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 the participating state solely because more of the CO_2 equivalent emissions reduction or carbon sequestration due to the offset project is projected to occur in New Jersey than in any other participating state; or

2. A consistency application has already been submitted for the same CO_2 emissions credit retirement in another participating state.

(h) Within 30 days following the receipt of the consistency application filed pursuant to (c) or (f) above, the Department will notify the project sponsor whether the consistency application is complete. A complete consistency application is one that is in a form prescribed by the Department and is determined by the Department to contain all applicable information and documentation required by this subchapter. 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 (i) below.

(i) Within 90 days of making the completeness determination under (h) above, the Department will issue a determination as to whether the offset project or CO_2 emissions credit retirement is consistent with the requirements of N.J.A.C. 7:27C-10.3 and 10.4 and the requirements of the applicable offset project standards of N.J.A.C. 7:27C-10.5 through 10.9. For any offset project or CO_2 emissions credit retirement found to be consistent with these requirements, the Department will issue a consistency determination to the project sponsor. For any offset project found to lack consistency with these requirements, the Department will inform the project sponsor of the offset project's deficiencies.

7:27C-10.5 CO_2 emissions offset project standards – landfill methane (CH_4) capture and destruction

(a) To qualify for the award of CO_2 offset allowances, in addition to satisfying the other applicable requirements of this subchapter, an offset project that captures and destroys methane from landfills shall meet the requirements of (b) through (f) below.

(b) An offset project under this section shall occur at a landfill that is not subject to the New Source Performance Standards for municipal solid waste landfills, 40 CFR Part 60, Subpart Cc and Subpart WWW.

(c) 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 requirements of (b) above. The project narrative shall include the following:

1. Identification of the owner and operator of the offset project;

2. The location and specifications of the landfill where the offset project will occur, including waste in place;

3. Identification of the owner and operator of the landfill where the offset project will occur; and

4. Specifications of the equipment to be installed and a technical schematic of the offset project.

(d) The emissions baseline shall represent the potential fugitive landfill emissions of methane (in tons of CO_2e), as represented by the methane collected and metered for thermal destruction as part of the offset project, and shall be calculated as follows:

Emissions (tons CO_2e) = (V x M x (1-OX) x GWP)/2000
where:

V = Volume of CH_4 collected (ft^3);

M = Mass of CH_4 per cubic foot (0.04246 lbs/ft^3 default value at one atmosphere and 20 degrees Celsius);

OX = Oxidation factor (0.10), representing estimated portion of collected CH_4 that would have eventually oxidized to CO_2 if not collected; and

GWP = CO_2e global warming potential of CH_4 (23).

(e) Emissions reductions shall be determined based on potential fugitive methane emissions that would have occurred at the landfill if metered methane collected from the landfill for thermal destruction as part of the offset project was not collected and destroyed. CO_2e emissions reductions shall be calculated as follows:

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

V = Volume of CH_4 collected (ft^3);

M = Mass of CH_4 per cubic foot (0.04246 lbs/ft^3 default value at one atmosphere and 20 degrees Celsius);

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); and

GWP = CO_2e global warming potential of CH_4 (23).

(f) An offset project under this section shall employ a landfill gas collection system that provides continuous metering and data computation of landfill gas volumetric flow rate and methane concentration. Annual monitoring and verification reports shall include monthly volumetric flow rate and methane concentration data, including documentation that the methane was actually supplied to the combustion source. Monitoring and verification is also subject to the following requirements:

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 methane concentration. 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 accredited independent verifier; and

2. The project sponsor shall annually verify landfill gas methane concentration through landfill gas sampling and independent laboratory analysis using EPA Test Method 3C, Determination of Carbon Dioxide, Nitrogen, and Oxygen from Stationary Sources, as supplemented and amended and which is incorporated by reference herein, and is available at http://www.epa.gov/ttn/emc/promgate.html.

7:27C-10.6 CO_2 emissions offset project standards – reductions in emissions of sulfur hexafluoride

(a) To qualify for the award of CO_2 offset allowances, in addition to satisfying the other applicable requirements of this subchapter, an offset project that prevents emissions of sulfur hexafluoride (SF_6) to the atmosphere from equipment in the electricity transmission and distribution sector, through capture and storage, recycling, or destruction, shall meet the requirements of (b) through (k) below.

(b) An offset project under this section shall consist of incremental actions beyond those taken during the baseline year to achieve a reduction in SF_6 emissions relative to the baseline year. These incremental actions may include an expansion of existing actions. The identified actions to be taken shall be consistent with the guidance provided in International Electrotechnical Commission (IEC) 1634, "High-voltage switchgear and control gear—Use and handling of sulfur hexafluoride (SF_6) in high-voltage switchgear and control gear," (CEI/IEC 1634, 1995-04), as supplemented or amended, and which is incorporated by reference herein, which is available from the American National Standards Institute, at http://www.ansi.org.

(c) Except as provided in (d) below, an offset project under this section shall have an SF_6 entity-wide emissions rate for the baseline year that is less than the applicable emissions rate in Table 1 below. The entity-wide SF_6 emissions rate shall be calculated as follows:

SF_6 Emissions Rate (percent) = (Total SF_6 Emissions for Reporting Year)/(Total SF_6 Nameplate Capacity at End of Reporting Year)
where:

SF_6 Nameplate Capacity refers to all SF_6-containing equipment owned and/or operated by the entity, at full and proper SF_6 charge of the equipment rather than the actual charge of the equipment (which may reflect leakage).

Table 1
SF_6 Emissions Rate Performance Standards
Emission Regions

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

Emissions Rate Performance Standards

Region	Emission Rate[a]
Region A	9.68 percent
Region B	5.22 percent
Region C	9.68 percent
Region D	5.77 percent
Region E	3.65 percent
U.S. (National)	9.68 percent

[a] Based on weighted average 2004 emissions rates for EPA SF_6 Partnership utilities in each region. In the case of a region where the weighted average emissions rate was higher than the national weighted average, the default performance standard reflected in the table is the national weighted average emissions rate.

(d) The SF_6 entity-wide emissions rate in the baseline year may exceed the applicable rate in Table 1 at (c) above, provided that the project sponsor demonstrates and the Department determines that the project is being implemented at a transmission and/or distribution entity serving a predominantly urban service territory and that at least two of the following factors prevent optimal management of SF_6:

1. The entity is comprised of older-than-average installed transmission and distribution equipment in relation to the national average age of equipment;

2. A majority of the entity's electricity load is served by equipment that is located underground, and poor accessibility of such underground equipment precludes management of SF_6 emissions through regular ongoing maintenance;

3. The entity is unable to take a substantial portion of equipment out of service, as such activity would impair system reliability; and

4. The required equipment purpose or design for a substantial portion of entity transmission and distribution equipment results in inherently leak-prone equipment.

(e) 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 requirements of (b) through (d) above. The offset project narrative shall include:

1. A description of the transmission and/or distribution entity sufficiently detailed so as to specify the service territory served by the entity; and

2. Identification of the owner and operator of the transmission and/or distribution entity.

(f) If the consistency application is filed after June 30, 2009, baseline SF_6 emissions shall be determined based on annual entity-wide reporting of SF_6 emissions for the calendar year immediately preceding the calendar year in which the consistency application is filed (designated the baseline year). If the consistency application is filed on or before June 30, 2009, the baseline year may be 2005 or the calendar year immediately preceding the calendar year in which the consistency application is filed. The reporting entity shall systematically track and account for all entity-wide uses of SF_6 in order to determine entity-wide emissions of SF_6. The scope of such tracking and accounting shall include all electric transmission and distribution assets and all SF_6-containing and SF_6-handling equipment owned and/or operated by the reporting entity. Emissions shall be determined and calculated as follows:

1. Emissions shall be determined based on the following mass balance method:

SF_6 Emissions (lbs) = (SF_6 Change in Inventory) + (SF_6 Purchases and Acquisitions) – (SF_6 Sales and Disbursements) – (Change in Total SF_6 Nameplate Capacity of Equipment)

where:

Change in Inventory is the difference between the quantity of SF_6 gas in storage at the beginning of the reporting year and the quantity in storage at the end of the reporting year. "Quantity in storage" includes all SF_6 gas contained in cylinders (such as 115-pound storage cylinders), gas carts, and other storage containers, but does not include SF_6 gas held in SF_6-using operating equipment. The change in inventory will be negative if the quantity of SF_6 gas in storage increases over the course of the year;

Purchases and Acquisitions of SF_6 is the sum of all the SF_6 gas acquired from other parties during the reporting year, as contained in storage containers or SF_6-using operating equipment;

Sales and disbursements of SF_6 is the sum of all the SF_6 gas sold or otherwise disbursed to other parties during the reporting year, as contained in storage containers and SF_6-using operating equipment; and

Change in Total SF_6 Nameplate Capacity of Equipment is the net change in the total volume of SF_6-containing operating equipment during the reporting year. The net change in nameplate capacity is equal to new equipment nameplate capacity, minus retired equipment nameplate capacity. This quantity will be negative if the retired equipment has a total nameplate capacity larger than the total nameplate capacity of the new equipment. "Total nameplate capacity" refers to the full and proper SF_6 charge of the equipment rather than to the actual charge, which may reflect leakage; and

2. Emissions shall be calculated as follows:

Emissions (tons CO_2e) = $[(V_{iby} - V_{iey}) + (PA_{psd} + PA_e + PA_{rre}) - (SD_{op} + SD_{rs} + SD_{df} + SD_{sor}) - (CNP_{ne} - CNP_{rse})]$ x GWP/2000

where (all SF_6 values in lbs):

V_{iby} = SF_6 inventory in cylinders, gas carts, and other storage containers (not SF_6-containing operating equipment) at the beginning of the reporting year;

V_{iey} = SF_6 inventory in cylinders, gas carts, and other storage containers (not SF_6-containing operating equipment) at the end of the reporting year;

PA_{psd} = SF_6 purchased from suppliers or distributors in cylinders;

PA_e = SF_6 provided by equipment manufacturers with or inside SF_6-containing operating equipment;

PA_{rre} = SF_6 returned to the reporting entity after off-site recycling;

SD_{op} = Sales of SF_6 to other parties, including gas left in SF_6-containing operating equipment that is sold;

SD_{rs} = Returns of SF_6 to supplier (producer or distributor);

SD_{df} = SF_6 sent to destruction facilities;

SD_{sor} = SF_6 sent off-site for recycling;

CNP_{ne} = Total SF_6 nameplate capacity of new SF_6-containing operating equipment at proper full charge;

CNP_{rse} = Total SF_6 nameplate capacity of retired or sold SF_6-containing operating equipment at proper full charge; and

GWP = CO_2e global warming potential of SF_6 (22,200).

(g) As part of the consistency application required at N.J.A.C. 7:27C-10.4 and in the annual monitoring and verification report required at N.J.A.C. 7:27C-10.11, the project sponsor shall provide the documentation required at (i) through (k) below to support emissions calculations.

(h) Emissions reductions shall represent the annual entity-wide emissions reductions of SF_6 for the reporting entity, relative to emissions in the baseline year. Emissions reductions shall be determined using the quantification method outlined in (f)2 above to determine emissions in both the baseline year and reporting year, as follows:

Emissions Reduction (tons CO_2e) = (Total Pounds of SF_6 Emissions in Baseline Reporting Year) – (Total Pounds of SF_6 Emissions in Reporting Year) x GWP/2000

where:

GWP = CO_2e global warming potential of SF_6 (22,200).

(i) The annual monitoring and verification report shall include supporting material detailing the calculations and data

used to determine SF_6 emissions reductions, including identification of the facility or facilities managed by the entity from which all SF_6 gas is procured and disbursed, and the entity-wide log of all SF_6 gas procurements and disbursals, maintained pursuant to (j) below. The annual monitoring and verification report shall also include a current entity-wide inventory of all SF_6-containing operating equipment and all other SF_6-related items, including cylinders, gas carts, and other storage containers used by the entity, certified by an accredited independent verifier.

(j) The project sponsor shall maintain an entity-wide log of all SF_6 gas procurements and disbursals. The entity-wide log shall include the weight of each cylinder transported before shipment from the facility and the weight of each cylinder after return to the facility. A specific cylinder log shall also be maintained for each cylinder that is used to fill equipment with SF_6 or reclaim SF_6 from equipment. The cylinder log shall be retained with the cylinder and indicate the location and specific identifying information of the equipment being filled, or from which SF_6 is reclaimed, and the weight of the cylinder before and after this activity. The cylinder log shall be returned with the cylinder to the facility when the activity is complete or the cylinder is empty.

(k) The project sponsor shall provide a monitoring and verification plan as part of the consistency application, which shall include an SF_6 inventory management and auditing protocol and a process for quality assurance and quality control of inventory data. The monitoring and verification plan shall be certified by an accredited independent verifier.

7:27C-10.7 CO_2 emissions offset project standards – sequestration of carbon due to afforestation

(a) To qualify for the award of CO_2 offset allowances, in addition to satisfying the other applicable requirements of this subchapter, an offset project that sequesters carbon through the conversion of land from a non-forested to forested condition shall meet the requirements of (b) through (u) below.

(b) An offset project under this section shall occur on land that has been in a non-forested state for at least 10 years immediately preceding the commencement of the offset project.

(c) An offset project under this section shall be managed in accordance with widely accepted environmentally sustainable forestry practices and designed to promote the restoration of native forests by using mainly native species and avoiding the introduction of invasive non-native species. If commercial timber harvest activities are to occur, certification shall be obtained, prior to any harvest activities at the site, through the Forest Stewardship Council, the Sustainable Forestry Institute, or the American Tree Farm System.

(d) 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 requirements of (b) above. The offset project narrative shall include the following:

1. Identification of the owner of the land within the offset project boundary;

2. A detailed map of the land within the offset project boundary and areas adjacent to the offset project boundary;

3. A copy of the permanent conservation easement required pursuant to (u) below;

4. For offset projects located in a state or United States jurisdiction that is not a participating state, a written legal opinion from an attorney licensed to practice in the state where the offset project is located, or from the cooperating regulatory agency, that the permanent conservation easement has been recorded with the appropriate jurisdiction and is enforceable; and

5. Identification of the plant species to be planted or established via natural regeneration and a forest management plan consistent with the requirements at (c) above.

(e) The existing sequestered carbon within the offset project boundary shall be calculated prior to commencement of the offset project. The carbon sequestration baseline shall be determined based on a sum of measurements, made no more than 12 months prior to offset project commencement, of the carbon content of the required and optional carbon pools, as set forth in (f) through (o) below.

(f) The carbon pools for which carbon calculation is required are as follows:

1. Live above-ground tree biomass;

2. Live below-ground tree biomass;

3. Soil carbon; and

4. Dead organic matter – coarse woody debris, unless the baseline measurement for this carbon pool is de minimis, that is, at or near zero, in which case measurement of this carbon pool during the allocation period is optional.

(g) The carbon pools for which carbon calculation is optional are as follows:

1. Live above-ground non-tree biomass; and

2. Dead organic matter – forest floor.

(h) Carbon content shall be calculated individually for each carbon pool within the offset project boundary.

(i) To increase the accuracy of measurement and verification, the area within the offset project boundary shall be divided into sub-populations that form relatively homogenous units. When defining sub-populations, the project sponsor shall consider vegetation and tree species (including existing vegetation and trees and those to be utilized as part

of the offset project activity) and site factors (soil type, elevation, slope, age class, and other factors as warranted).

(j) Calculation of sequestered carbon for each carbon pool in each reporting sub-population shall be based on the following:

$$CO_2 \text{ tons} = [(A \times C/ha)(44/12)] / 0.9072$$

where:

A = Area in hectares within each reporting sub-population;

C = Carbon content (metric tons of carbon for each carbon pool); and

C/ha = Mean carbon content per hectare for each carbon pool.

(k) Total carbon contained within the offset project boundary (represented in CO_2 tons, calculated pursuant to (j) above) shall be calculated as follows:

$$TC_{pb} = TC_{latb} + TC_{lbtb} + TC_s [+ TC_{lantb} + TC_{doff} + TC_{docwd}]$$

where:

TC_{pb} = Total carbon content within the offset project boundary (sum of carbon content of all carbon pools in all reporting sub-populations);

TC_{latb} = Sum of carbon content of live above-ground tree biomass in all reporting sub-populations;

TC_{lbtb} = Sum of carbon content of live below-ground tree biomass in all reporting sub-populations;

TC_s = Sum of carbon content of soil carbon in all reporting sub-populations;

TC_{lantb} [option] = Sum of carbon content of live above-ground non-tree biomass in all reporting sub-populations;

TC_{doff} [option] = Sum of carbon content of dead organic matter, forest floor in all reporting sub-populations; and

TC_{docwd} [mandatory/optional, as applicable, pursuant to (f)4 above] = Sum of carbon content of dead organic matter, coarse woody debris in all reporting sub-populations.

(*l*) Each individual carbon pool to be measured shall be directly measured using a measurement protocol and sample size that achieves a demonstrated quantified accuracy for the combined carbon pool measurement such that there is 95 percent confidence that the resulting reported value is within 10 percent of the true mean. Measurement and sampling practices shall meet the following requirements:

1. An adequate sample size that meets the requirements of this subsection shall be determined for each sub-population; and

2. The minimum number of required sampling plots for each sub-population shall be determined based on the following:

$$n = (s \times 1.960)/(\text{mean} \times re)^2$$

where:

n = required number of sample plots for each reporting sub-population;

s = standard deviation;

mean = mean reported carbon content for the sample population; and

re = level of sampling error (0.08) to assure a total maximum error of 10 percent for the 95 percent confidence interval, which assumes total error due to measurement error of 0.02.

(m) Direct measurement procedures shall be consistent with current forestry good practice and the guidance contained in U.S. Department of Energy, Technical Guidelines Voluntary Reporting of Greenhouse Gases (1605(b)) Program; Chapter 1, Emissions Inventories; Part 1 Appendix: Forestry; Section 3: Measurement Protocols for Forest Carbon Sequestration (March 2006), as supplemented and amended and which is incorporated by reference herein, which is available from the U.S. Department of Energy at http://www.pi.energy.gov/enhancingGHGregistry/documents/PartIForestryAppendix.pdf.

(n) Carbon sequestration shall be determined using a base year approach, where the amount of carbon sequestered is measured as a net increase in carbon relative to the base year measurement. Carbon sequestration shall be the amount of net additional carbon sequestered during each reporting period at (r) below, based upon aggregate carbon uptake and carbon emissions for the sum of carbon pools, relative to the baseline carbon content or the carbon content as of the previous reporting period (if above the baseline carbon content), as applicable. CO_2 offset allowances shall be issued based on the amount of net additional carbon sequestered within the offset project boundary during each reporting period at (r) below, as represented in tons of CO_2. Sequestered carbon shall be calculated using a stock-change approach as follows:

$$NCS_t = I_t - I_{t-1}$$

where:

NCS_t = Net carbon sequestered in reporting period t;

I_t = Inventory of carbon stock for all carbon pools in all reporting sub-populations within the offset project boundary in reporting period t; and

I_{t-1} = Inventory of carbon stock for all carbon pools in all reporting sub-populations within the offset project boundary in the reporting period immediately preceding reporting period t.

(*o*) Except as provided in (f)4 above, each of the carbon pools that was measured as part of the baseline determination shall be re-measured using the same methodology, and to the same or better quantified precision consistent with the requirements of (*l*) and (m) above, as that used for the baseline determination.

(p) The net change in each carbon pool's carbon stock in each reporting sub-population is calculated by subtracting the baseline carbon stock (or carbon stock at the previous monitoring, if above the baseline carbon content) from the carbon stock at the time of the current monitoring. Determination of carbon stock shall be in accordance with the formulas and procedures in this section.

(q) Net carbon stock change for the offset project is the sum of the net changes in the carbon stock of all applicable pools in all reporting sub-populations within the offset project boundary, less 10 percent, to account for potential losses of sequestered carbon. This 10 percent discount shall not be required, provided the project sponsor retains long-term insurance that guarantees replacement of any lost sequestered carbon for which CO_2 offset allowances were awarded pursuant to N.J.A.C. 7:27C-10.11(a).

(r) Total carbon stock within the offset project boundary shall be calculated at least once every five years.

(s) Monitoring and verification reports shall include data from direct measurement of carbon content for all plots used to determine baseline and reporting period carbon content.

(t) The consistency application shall include a monitoring and verification plan certified by the Department or an accredited independent verifier. The monitoring and verification plan shall include the following:

1. Direct carbon measurement procedures consistent with the requirements at (m) above;

2. The designation of sub-populations pursuant to (i) above and the determination of the minimum number of sampling plots pursuant to (*l*) above; and

3. If commercial timber harvest activities have occurred or will occur, an assessment of management practices to ensure that the offset project has been or will be managed in accordance with environmentally sustainable forestry practices consistent with the Forest Stewardship Council, the Sustainable Forestry Institute, or the American Tree Farm System.

(u) The offset project shall meet the following requirements to address permanence of sequestered carbon:

1. The project sponsor shall place the land within the offset project boundary under a legally binding permanent conservation easement that requires the land to be maintained in a forested state in perpetuity;

2. The conservation easement shall include a requirement that the carbon density within the offset project boundary be maintained at long-term levels at or above that achieved as of the end of the final allocation period for the offset project pursuant to N.J.A.C. 7:27C-10.3(h); and

3. The conservation easement shall require that the land be managed in accordance with environmentally sustainable forestry practices.

7:27C-10.8 CO_2 emissions offset project standards – reduction or avoidance of CO_2 emissions from natural gas, oil, or propane end-use combustion due to end-use energy efficiency

(a) To qualify for the award of CO_2 offset allowances, in addition to satisfying the other applicable requirements of this subchapter, an offset project that reduces CO_2 emissions by reducing on-site combustion of natural gas, oil, or propane for end-use in an existing or new commercial or residential building by improving the energy efficiency of fuel usage and/or the energy-efficient delivery of energy services shall meet the requirements of (b) through (n) below.

(b) An offset project under this section shall reduce CO_2 emissions through one or more of the following energy conservation measures:

1. Improvements in the energy efficiency of combustion equipment that provide space heating and hot water, including a reduction in fossil fuel consumption through the use of solar or geothermal energy;

2. Improvements in the efficiency of heating distribution systems, including proper sizing and commissioning of heating systems;

3. Installation or improvement of energy management systems;

4. Improvement in the efficiency of hot water distribution systems and reduction in demand for hot water;

5. Measures that improve the thermal performance of the building envelope and/or reduce building envelope air leakage;

6. Measures that improve the passive solar performance of buildings and utilization of active heating systems using renewable energy; or

7. Fuel switching to a less carbon-intensive fuel for use in combustion systems, including the use of liquid or gaseous eligible biomass, provided that conversions to electricity are not eligible.

(c) An HVAC system installed as part of an offset project shall meet the following sizing and installation requirements:

1. For a commercial HVAC system, the applicable sizing and installation requirements of ANSI/ASHRAE/IESNA Standard 90.1-2007 and ANSI/ASHRAE Standard

62.1-2004: Ventilation for Acceptable Indoor Air Quality, as supplemented and amended and which is incorporated by reference herein, which is available from the American Society of Heating, Refrigerating and Air-Conditioner Engineers at http://www.ashrae.org; or

2. For a residential HVAC system, the applicable sizing specifications of Air Conditioner Contractors of America Manual J: Residential Load Calculation (Eighth Edition), and the applicable installation specifications of "Specification of Energy-Efficient Installation and Maintenance Practices for Residential HVAC Systems," Consortium for Energy Efficiency, 2000, both as supplemented and amended and incorporated by reference herein, which is available from the Air Conditioner Contractors of America at http://www.acca.org.

(d) A new building or whole-building retrofit that is part of an offset project shall meet the following requirements:

1. A commercial building shall exceed by 30 percent the energy performance requirements of ANSI/ASHRAE/IESNA Standard 90.1-2007, with the exception of multi-family residential buildings classified as commercial by ANSI/ASHRAE/IESNA Standard 90.1-2007, which must exceed these energy performance requirements by 20 percent; and

2. A residential building shall exceed by 30 percent the energy performance requirements of the 2004 International Energy Conservation Code, as supplemented and amended and which is incorporated by reference herein, which is available from the International Code Council at http://www.iccsafe.org.

(e) Combustion equipment installed as part of an offset project commenced before January 1, 2009 shall meet the following energy efficiency performance standards:

1. A commercial boiler shall meet or exceed the energy efficiency criteria in Table 2 below:

Table 2
Minimum Commercial Boiler Energy Efficiency

Technology	Size (Btu/hr)	Rating Method	Minimum Efficiency
Gas-fired[a]	125,000-300,000	AFUE	≥88.0 percent
	300,000-12,500,000	Thermal Efficiency[b]	≥90.0 percent
Oil-fired	>300,000	Thermal Efficiency	≥88.0 percent

[a] A gas-fired boiler shall be installed with controls that allow the boiler to operate in condensing mode and installed with vents designed for positive vent static pressure and vent gas temperature that leads to condensate production in the vent.

[b] Thermal Efficiency is determined by dividing useful energy output (Btu) by energy input (Btu), expressed as a percentage. This shall be measured under steady state conditions, at full-rated useful thermal output, 140 degrees Fahrenheit supply from, and 120 degrees Fahrenheit return water temperature to, the boiler.

; and

2. Residential combustion equipment, including furnaces, boilers, and water heaters, shall meet or exceed the energy efficiency criteria in Table 3 below:

Table 3
Minimum Residential Combustion Equipment[a] Energy Efficiency

Technology	Rating Method	Minimum Efficiency
Gas-fired furnace	AFUE	≥94 percent
Oil-fired furnace	AFUE	≥92 percent
Gas/oil-fired boiler	AFUE	≥90 percent
Gas/oil-fired water heater	Energy Factor	≥0.62

[a] For furnaces, defined as equipment with a heat input rate of less than 225,000 Btu/hr; for boilers, defined as equipment with a heat input rate of less than 300,000 Btu/hr; for water heaters, defined as equipment subject to 10 CFR 430, and which is incorporated by reference herein.

(f) Energy conservation measures implemented as part of an offset project commenced before January 1, 2009 other than combustion equipment described at (e) above, shall meet the prescriptive requirements, as applicable, in Energy Benchmark for High Performance Buildings, Version 1.1, New Buildings Institute, 2005 (Energy Benchmark), which is incorporated herein by reference, which is available from Advanced Buildings at http://www.advancedbuildings.net/publications.htm, or applicable state building energy codes, whichever result in better energy performance. An energy conservation measure for which the Energy Benchmark does not provide specified performance criteria shall meet the requirements of the Federal Energy Management Program Product Energy Efficiency Recommendations (issued pursuant to Executive Orders 13123 and 13221) as supplemented and amended and which is incorporated herein by reference, which is available through the FEMP website at http://www1.eere.energy.gov/femp/procurement/eep_requirements.html, or Energy Star criteria issued jointly by the EPA and the United States Department of Energy, incorporated by reference herein and which are available at the Energy Star website at http://www.energystar.gov/index.cfm?c=product_specs.pt_product_specs, whichever result in better energy performance.

(g) For an offset project under this section initiated on or after January 1, 2009, the project sponsor shall demonstrate that the energy conservation measures implemented as part of the offset project have a market penetration rate of less than five percent.

(h) The offset project sponsor shall provide a detailed narrative of the offset project actions to be taken, and shall include supporting documentation that the offset project meets the requirements of (b) through (g) above. The offset project narrative and supporting documentation shall include the following:

1. The location and specifications of the building(s) where the offset project actions will occur;

2. The name/identification of the owner and operator of the building(s);

3. The name/identification of the parties implementing the offset project, including lead contractor(s), subcontractors, and consulting firms;

4. Specifications of equipment and materials to be installed as part of the offset project; and

5. Building plans and offset project technical schematics, as applicable.

(i) The emissions baseline shall be determined in accordance with (i)1 through 3 below, based on energy usage (MMBtu) by fuel type for each energy conservation measure, derived using historic fuel use data from the most recent calendar year for which data is available, and multiplied by an emissions factor and oxidation factor for each respective fuel in Table 4 below:

Table 4
Emissions and Oxidation Factors

Fuel	Emissions Factor (lbs. CO_2/MMBtu)	Oxidation Factor
Natural Gas	116.98	0.995
Propane	139.04	0.995
Distillate Fuel Oil	161.27	0.99
Kerosene	159.41	0.99
Liquid Eligible Biomass	0.00	0.99
Gaseous Eligible Biomass	0.00	0.995

1. The baseline energy usage of the application to be targeted by the energy conservation measure shall be isolated in a manner consistent with (n) below;

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

$$\text{Energy Usage (MMBtu)} = BEU_{AECM} \times A$$

where:

BEU_{AECM} = Annual pre-installation baseline energy use by fuel type (MMBtu) attributable to the application(s) to be targeted by the energy conservation measure(s). If applicable building codes or equipment standards require that equipment or materials installed as part of the offset project meet certain minimum energy performance requirements, baseline energy usage for the application shall assume that equipment or materials are installed that meet such minimum requirements. For offset projects that replace existing combustion equipment, the assumed minimum energy performance required by applicable building codes or equipment standards shall be that which applies to new equipment that uses the same fuel type as the equipment being replaced. Baseline energy usage shall be determined in accordance with the applicable requirements at (n) below; and

A = Adjustments to account for differing conditions during the two time periods (pre-installation and post-installation), such as weather, building occupancy, and changes in building use or function. Adjustments shall be determined in accordance with the applicable requirements at (n) below; and

3. Annual baseline emissions shall be determined as follows:

$$\text{Emissions (lbs. } CO_2) = \sum_{i=1}^{n} BEU_i \times EF_i \times OF_i$$

where:

BEU_i = Annual baseline energy usage for fuel type i (MMBtu) demonstrated pursuant to the requirements at (n) below;

EF_i = Emissions factor (lbs. CO_2/MMBtu) for fuel type i listed in Table 4 above;

OF_i = Oxidation factor for fuel type i listed at Table 4 above; and

n = Number of fuel types.

(j) Emissions reductions shall be determined based upon annual energy savings by fuel type (MMBtu) for each energy conservation measure, multiplied by the emissions factor and oxidation factor for the respective fuel type at Table 4 at (i) above. Annual energy savings and annual emissions reductions shall be determined as set forth in (j)1 and 2 below, respectively:

1. Annual energy savings shall be determined as follows:

$$\text{Energy Savings (MMBtu)} = (BEU_{AECM} \times A) - (PIEU_{ECM} \times A)$$

where:

BEU_{AECM} = Annual pre-installation baseline energy use by fuel type (MMBtu) calculated pursuant to (n) below;

$PIEU_{ECM}$ = Annual post-installation energy use by fuel type (MMBtu) attributable to the energy conservation measure. Post-installation energy usage shall be determined in accordance with the applicable requirements at (n) below; and

A = Adjustments to account for any differing conditions during the two time periods (pre-installation and post-installation), such as weather, building occupancy, and

changes in building use or function. Adjustments shall be determined in accordance with the applicable requirements at (n) below; and

2. Annual emissions reductions shall be determined as follows:

$$\text{Emissions Reduction (lbs. } CO_2) = \sum_{i=1}^{n} ES_i \times EF_i \times OF_i$$

where:

ES_i = Energy savings for fuel type i (MMBtu) demonstrated pursuant to (n) below;

EF_i = Emissions factor (lbs. CO_2/MMBtu) for fuel type i listed at Table 4 at (i) above;

OF_i = Oxidation factor for fuel type i listed at Table 4 at (i) above; and

n = Number of fuel types.

(k) As part of the consistency application, the project sponsor shall provide a monitoring and verification plan certified by an accredited independent verifier.

(*l*) Annual monitoring and verification reports shall be certified by an accredited independent verifier. An accredited independent verifier shall conduct a site audit when reviewing the first monitoring and verification report submitted by the project sponsor, except for offset projects that save less than 1,500 MMBtu per year. For offset projects that save less than 1,500 MMBtu per year, the project sponsor shall provide the accredited independent verifier with equipment specifications and copies of equipment invoices and other relevant offset project-related invoices.

(m) All offset project documentation, including the consistency application and monitoring and verification reports, shall be signed by a professional engineer, identified by license number.

(n) Monitoring and verification shall meet the following requirements, in addition to those at (k) through (m) above:

1. Monitoring and verification of energy usage shall be demonstrated through a documented process consistent with the following protocols and procedures, as applicable:

i. For an existing commercial building, determination of baseline energy usage shall be consistent with the International Performance Measurement & Verification Protocol, Volume I: Concepts and Options for Determining Energy and Water Savings (IPMVP Volume I), "Option B. Retrofit Isolation" and "Option D. Calibrated Simulation," as supplemented and amended and which are incorporated by reference herein and which are available at http://www.ipmvp.org. If a building project involves only energy conservation measures implemented as part of an offset project, a process consistent with IPMVP Volume I "Option C. Whole Facility," as supplemented and amended and which is incorporated by reference herein and which is available at http://www.ipmvp.org, may be used, as applicable. Application of the IPMVP Volume I general guidance, as supplemented and amended and which is incorporated by reference herein, and which is available at http://www.ipmvp.org, shall be consistent with the applicable detailed specifications in ASHRAE Guideline 14-2002;

ii. For a new commercial building, determination of baseline energy usage shall be consistent with the International Performance Measurement & Verification Protocol, Volume III: Concepts and Options for Determining Energy Savings in New Construction (IPMVP Volume III), "Option D. Calibrated Simulation," as supplemented and amended and which is incorporated by reference herein and which is available at http://www.ipmvp.org. Application of the IPMVP Volume III general guidance, as supplemented and amended and which is incorporated by reference herein, and which is available at http://www.ipmvp.org, shall be consistent with the applicable detailed specifications in ASHRAE Guideline 14-2002; or

iii. For an existing or new residential building, determination of baseline energy usage shall be consistent with the requirements of the RESNET National Home Energy Rating Technical Guidelines, 2006 (Chapter 3 and Appendix A of 2006 Mortgage Industry National Home Energy Rating System Standards), as supplemented and amended and which is incorporated by reference herein, which is available from the Residential Energy Services Network at http://www.resnet.us;

2. In calculating both baseline energy usage and energy savings, the project sponsor shall isolate the impact of each ECM, either through direct metering or energy simulation modeling. For offset projects with multiple ECMs, and where an individual ECM can affect the performance of other ECMs, the sum of energy savings due to an individual ECM shall be adjusted to account for the interaction of ECMs. For commercial buildings, this process shall be consistent with the requirements of ASHRAE Guideline 14-2002, and ANSI/ASHRAE/IESNA Standard 90.1-2007. For residential buildings, this process shall be consistent with the requirements of RESNET National Home Energy Rating Technical Guidelines, 2006 (Chapter 3 and Appendix A of 2006 Mortgage Industry National Home Energy Rating System Standards), as supplemented and amended and which is incorporated by reference herein, which is available from the Residential Energy Services Network at http://www.resnet.us. Reductions in energy usage due to the ECM shall be based upon actual energy usage data. Energy simulation modeling shall only be used to determine the relative percentage contribution to total fuel usage (for each respective fuel type) of the application targeted by the ECM;

3. For monitoring and verification of energy usage, annual energy savings shall be determined based on the following:

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

where:

BEU_{AECM} = Annual pre-installation baseline energy use by fuel type (MMBtu) attributable to the application(s) to be targeted by the ECM, based upon annual fuel usage data for the most recent calendar year for which data is available. For new commercial buildings, baseline energy use for a reference building equivalent in basic configuration, orientation, and location to the building in which the eligible ECM is implemented shall be determined according to ASHRAE Guideline 14-2002, and ANSI/ASHRAE/IESNA Standard 90.1-2007, Section 11, Energy Cost Budget Method, and Appendix G, Performance Rating Method. Where energy simulation modeling is used to evaluate an existing commercial building, modeling shall be conducted in accordance with ASHRAE Guideline 14-2002, and ANSI/ASHRAE/IESNA Standard 90.1-2007, Section 11, Energy Cost Budget Method, and Appendix G, Performance Rating Method. For existing and new residential buildings, energy simulation modeling shall be conducted in accordance with the requirements of RESNET National Home Energy Rating Technical Guidelines, 2006 (Chapter 3 and Appendix A of 2006 Mortgage Industry National Home Energy Rating System Standards), as supplemented and amended and which is incorporated by reference herein, which is available from the Residential Energy Services Network at http://www.resnet.us;

$PIEU_{ECM}$ = Annual post-installation energy use by fuel type (MMBtu) attributable to the energy conservation measure, to be verified based on annual energy usage after installation of the energy conservation measure(s), consistent with the requirements of ASHRAE Guideline 14-2002. Where energy simulation modeling is used to evaluate a new or existing commercial building, modeling shall be conducted in accordance with ASHRAE Guideline 14-2002 and ANSI/ASHRAE/IESNA Standard 90.1-2007, Section 11, Energy Cost Budget Method, and Appendix G, Performance Rating Method. For existing and new residential buildings, energy simulation modeling shall be consistent with the requirements of RESNET National Home Energy Rating Technical Guidelines, 2006 (Chapter 3 and Appendix A of 2006 Mortgage Industry National Home Energy Rating System Standards), as supplemented and amended and which is incorporated by reference herein, which is available from the Residential Energy Services Network at http://www.resnet.us; and

A = Adjustments to account for any differing conditions during the two time periods (pre-installation and post-installation), such as weather (weather-normalized energy usage based on heating and cooling degree days), building occupancy, and changes in building use or function. For commercial buildings, adjustments shall be consistent with the specifications of ASHRAE Guideline 14-2002, and ANSI/ASHRAE/IESNA Standard 90.1-2007, Section 11, Energy Cost Budget Method, and Appendix G, Performance Rating Method. For residential buildings, adjustments shall be consistent with the specifications of RESNET National Home Energy Rating Technical Guidelines, 2006 (Chapter 3 and Appendix A of 2006 Mortgage Industry National Home Energy Rating System Standards), as supplemented and amended and which is incorporated by reference herein, which is available from the Residential Energy Services Network at http://www.resnet.us; and

4. For monitoring and verification of energy usage, offset projects that implement similar measures in multiple residential buildings may employ representative sampling of buildings to determine aggregate baseline energy usage and energy savings. Sampling protocols shall employ sound statistical methods such that there is 95 percent confidence that the reported value is within 10 percent of the true mean. Any sampling plan shall be certified by an accredited independent verifier.

7:27C-10.9 CO_2 emissions offset project standards – avoided methane emissions from agricultural manure management operations

(a) To qualify for the award of CO_2 offset allowances, in addition to satisfying the other applicable requirements of this subchapter, an offset project that reduces CO_2-equivalent emissions by capturing and destroying methane from animal manure and organic food waste using anaerobic digesters shall meet the requirements of (b) through (g) below.

(b) An offset project that captures and destroys methane from animal manure and organic food waste using anaerobic digesters shall:

1. 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; and

2. Employ only manure-based anaerobic digester systems using livestock manure as the majority of digester feedstock, defined as more than 50 percent of the mass input into the digester on an annual basis. The remainder of the digester feedstock may be organic food waste that would have been stored in anaerobic conditions in the absence of the offset project.

(c) The provisions of N.J.A.C. 7:27C-10.3(f)2 and 3 do not apply to agricultural manure management offset projects if:

1. The offset project is located in a state that has a market penetration rate for anaerobic digester projects of five percent or less. The market penetration rate determination shall utilize the most recent market data

available at the time of submission of the consistency application pursuant to N.J.A.C. 7:27C-10.4 and shall be determined as follows:

$$MP\ (percent) = MG_{AD}/MG_{STATE}$$

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 N.J.A.C. 7:27C-10.4; and

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 N.J.A.C. 7:27C-10.4; or

2. The offset project is located at a farm with 4,000 or fewer head of dairy cows, or a farm with equivalent animal units, assuming an average live weight for dairy cows (in pounds per cow) of 1,400 pounds, 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 fewer head of dairy cows, or a farm with equivalent animal units, assuming an average live weight for dairy cows (in pounds per cow) of 1,400 pounds.

(d) 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 requirements of (b) above. The offset project narrative shall include:

1. Identification of the owner and operator of the offset project;

2. The location and specifications of the facility where the offset project will occur;

3. Identification of the owner and operator of the facility where the offset project will occur;

4. Specifications of the equipment to be installed and a technical schematic of the offset project; and

5. The location and specifications of the facilities from which anaerobic digester influent will be received, if different from the facility where the offset project will occur.

(e) The emissions baseline shall represent the potential emissions of the methane 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, and is calculated as follows:

1. Baseline methane emissions shall be calculated as follows:

$$CO_2e\ (tons) = (V_m \times M)/2000 \times GWP$$

where:

CO_2e = Potential CO_2e emissions due to calculated CH_4 production under site-specific anaerobic storage and weather conditions;

V_m = Volume of CH_4 produced each month from degradation 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 (ft^3);

M = Mass of CH_4 per cubic foot (0.04246 lb/ft^3 default value at one atmosphere and 20 degrees Celsius); and

GWP = Global warming potential of CH_4 (23);

2. The estimated amount of volatile solids degraded each month under the uncontrolled anaerobic storage baseline scenario (kg) shall be calculated as follows:

$$VS_{deg} = VS_{avail} \times f$$

where:

VS = volatile solids as determined from the equation:

$$VS = M_m \times TS_{percent} \times VS_{percent}$$

where:

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

$TS_{percent}$ = concentration (percent) of total solids in manure or organic food waste as determined through USGS I-3750-85, Solids, residue on evaporation at 105 degrees Celsius, total, gravimetric, as supplemented or amended and incorporated by reference herein, which is available at http://www.usgs.gov; and

$VS_{percent}$ = concentration (percent) of volatile solids in total solids as determined through EPA Test Method Number 160.4, Residue, Volatile (Gravimetric, Ignition at 550° C), as supplemented or amended and incorporated by reference herein, and which is available at http://www.usgs.gov;

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

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

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 degradation for the entire duration of the month; and

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); and

f = van't Hoff-Arrhenius factor for the specific month as determined using the equation below. Using a base temperature of 30 degrees Celsius, 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 degrees Celsius to degrees Kelvin) as determined from the nearest National Weather Service certified weather station (if reported temperature in degrees Celsius > five degrees Celsius; if reported temperature in degrees Celsius < five degrees Celsius, then f = 0.104); and

T_1 = 303.15 (30 degrees Celsius converted to degrees Kelvin); and

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

3. The volume of methane produced, in cubic feet (ft^3), from degradation of volatile solids shall be calculated as follows:

$$V_m = (VS_{deg} \times B_o) \times 35.3147$$

where:

V_m = volume of CH_4 (ft^3);

VS_{deg} = volatile solids degraded (kg); and

B_o = manure or organic food waste type-specific maximum methane generation constant (m^3 CH_4/kg VS degraded). For dairy cow manure, B_o = 0.24 m^3 CH_4/kg VS degraded. The methane generation constant for other types of manure shall be those cited at EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2005, Annex 3.10, Methodology for Estimating CH_4 and N_2O Emissions from Manure Management, Table A-160 (2006 Manure Distribution Among Waste Management Systems by Operation (Percent)) (EPA, April 2007), as supplemented or amended, and which is incorporated by reference herein and which is available from EPA at http://www.epa.gov/climatechange/emissions/usinventoryreport.html#, unless the project sponsor proposes an alternate methane generation constant.

(f) Emissions reductions shall be determined based on the potential emissions (in tons of CO_2e) of the methane that would have been produced in the absence of the offset project under a baseline scenario that represents uncontrolled anaerobic storage conditions, as calculated pursuant to (e)1 through 3 above, and released directly to the atmosphere. Emissions reductions shall not exceed the potential emissions of the anaerobic digester, as represented by the annual volume of methane produced by the anaerobic digester, as monitored pursuant to (g) below. If the project is a regional-type digester, CO_2 emissions due to transportation of manure and organic food waste from the site where the manure and organic food waste was generated to the anaerobic digester shall be subtracted from the emissions reduction calculated pursuant to (e)1 through 3 above. Transport CO_2 emissions shall be determined through one of the following methods:

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. CO_2 emissions shall be determined through the application of an emissions factor for the fuel type used. For this method of determination, the emissions factor for the use of diesel fuel is 22.912 pounds of CO_2 per gallon, and for the use of gasoline, 19.878 pounds of CO_2 per gallon. If other fuel is used, the project sponsor, as part of the monitoring and verification report submitted pursuant to N.J.A.C. 7:27C-10.11(c) or (d) may submit an emissions factor for approval by the Department as technically appropriate; or

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 (g)1 below, and a log of transport miles and fuel type used for each shipment. CO_2 emissions shall be determined through the application of a ton-mile transport emissions factor for the fuel type used. The appropriate emissions factor shall be applied for each ton of manure delivered, and multiplied by the number of miles transported. For this method of determination, the emissions factor for the use of diesel fuel is 0.131 pounds of CO_2 per ton-mile, and for the use of gasoline is 0.133 pounds of CO_2 per ton-mile. If other fuel is used, the project sponsor may submit an emissions factor for approval by the Department as technically appropriate;

(g) An offset project must employ a system that provides metering of biogas volumetric flow rate and determination of methane concentration. Annual monitoring and verification reports shall include monthly biogas volumetric flow rate and methane concentration determination. Monitoring and verification shall also meet the following requirements:

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, in kilograms (kg) being digested and percentage of volatile solids present before digestion, consistent with (e) above and (g)3 below, and apportioned accordingly among sources. The project sponsor shall provide supporting material and receipts tracking the monthly receipt of manure and organic food waste in kilograms (kg) used to supply the anaerobic digester from each supplier;

2. If the offset project includes the digestion of organic food waste eligible pursuant to (b)2 above, organic food waste shall be sampled monthly to determine the amount of volatile solids present before digestion, consistent with the

requirements at (e) above and (g)3 below, and apportioned accordingly;

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 methane composition. The monitoring and verification plan shall be consistent with the applicable input monitoring requirements listed in Table 5 below. 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 accredited independent verifier; and

Table 5
Input Monitoring Requirements

Input Parameter	Measurement Unit	Frequency of Sampling	Sampling Method(s)
Influent flow (mass) into the digester	Kilograms (kg) per month (wet weight)	Monthly total into the digester	In descending order of preference: 1. Recorded weight; 2. Digester influent pump flow; or 3. Livestock population and application of American Society of Agricultural and Biological Engineers standard, ASAE D384.2, Manure Production and Characteristics, March 2005, as supplemented or amended, and incorporated by reference herein, and which is available from the American National Standards Institute (ANSI) at http://www.ansi.org.
Influent total solids concentration (TS)	Percent (of sample)	Monthly, depending upon recorded variations	USGS I-3750-85, Solids, residue on evaporation at 105 degrees C total, gravimetric, as supplemented and amended and incorporated by reference herein, and which is available at http://www.usgs.gov.
Influent volatile solids (VS) concentration	Percent (of TS)	Monthly, depending upon recorded variations	EPA Test Method Number 160.4, Residue, Volatile (Gravimetric, Ignition at 550° C), as supplemented or amended and incorporated by reference herein, and which is available at http://www.usgs.gov.
Average monthly ambient temperature	Temperature degrees Celsius	Monthly (based on farm averages)	Closest National Weather Service-certified weather station

4. The project sponsor shall verify biogas methane composition quarterly through gas sampling and third party laboratory analysis using EPA Test Method 3C, Determination of Carbon Dioxide, Nitrogen, and Oxygen from Stationary Sources, as supplemented and amended and incorporated by reference herein, and which is available at http://www.epa.gov/ttn/emc/promgate.html.

Administrative correction.
See: 41 N.J.R. 1025(b).

7:27C-10.10 Accreditation of independent verifiers

(a) To be accredited by the Department to provide verification services as required of project sponsors under this subchapter, an independent verifier shall:

1. Demonstrate knowledge of:

i. Utilization of engineering principles;

ii. Quantification of greenhouse gas emissions;

iii. Development and evaluation of air emissions inventories;

iv. Auditing and accounting principles;

v. Information management systems;

vi. The requirements of this subchapter and other applicable requirements of this chapter; and

vii. The data collection, quantification, monitoring, and verification requirements for the individual offset categories specified at N.J.A.C. 7:27C-10.5 through 10.9;

2. Demonstrate that there is no direct or indirect financial relationship, beyond a contract for provision of verification services, between the independent verifier and any offset project developer or project sponsor;

3. Demonstrate the employment of staff with professional licenses, knowledge, and experience appropriate to the specific category or categories of offset projects at N.J.A.C. 7:27C-10.5 through 10.9 to be verified;

4. Demonstrate coverage of a minimum of $1,000,000 of professional liability insurance. If the insurance is in the name of a related entity, the independent verifier shall disclose the financial relationship between the independent verifier and the related entity, and provide documentation supporting the description of the relationship;

5. Demonstrate implementation of 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 N.J.A.C. 7:27C-10.4(e), and remedy any such conflicts of interest prior to providing verification services; and

6. Prior to submitting an application for accreditation, successfully complete any training course, workshop, or test developed by the Department to ensure that an independent verifier has sufficient demonstrated knowledge pursuant to (a)1 above to provide verification services under this subchapter.

(b) An application for accreditation shall not contain any proprietary information, and shall include the following:

1. The applicant's name, address, e-mail address, telephone number, and facsimile transmission number;

2. Documentation that the applicant has at least two years of experience in each of the knowledge areas at (a)1i through v above, and as may be required pursuant to (a)1vii above;

3. Documentation that the applicant has successfully completed the requirements at (a)6 above, as applicable;

4. A sample of at least one work product that provides supporting evidence that the applicant meets the requirements at (a)1 above. The work product shall have been produced, in whole or part, by the applicant and shall consist of a final report or other material provided to a client under contract in previous work. For a work product that was jointly produced by the applicant and another entity, the role of the applicant in the work product shall be clearly explained;

5. Documentation that the applicant holds professional liability insurance as required pursuant to (a)4 above; and

6. Documentation that the applicant has implemented an adequate management protocol to address and remedy any conflict of interest issues that may arise, as required pursuant to (a)5 above.

(c) The Department will 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.

(d) The Department will accept the accreditation of an independent verifier that is accredited in another participating state where the Department has determined substantial equivalency between the accreditation requirements in New Jersey and those of the other participating state.

(e) Prior to engaging in verification services for an offset project sponsor, an accredited independent 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 independent 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.

(f) An accredited independent verifier 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.

(g) The Department may reject a verification report and certification from an accredited independent verifier, submitted as part of a consistency application required pursuant

to N.J.A.C. 7:27C-10.4 or submitted as part of a monitoring and verification report submitted pursuant to N.J.A.C. 7:27C-10.11(c) or (d), if the Department determines that the accredited independent verifier has a conflict of interest related to the offset project, offset project developer, or project sponsor.

(h) The Department may revoke the accreditation of an independent verifier at any time, for any of the following:

1. Failure by the accredited independent verifier 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;

2. A change in staffing or other criteria so that the accredited independent verifier is no longer qualified;

3. Negligence or neglect of responsibilities by the accredited independent verifier pursuant to the requirements of this subchapter; or

4. Intentional misrepresentation of data or other fraud by the accredited independent verifier.

7:27C-10.11 Award of CO_2 offset allowances

(a) Following the issuance of a consistency determination under N.J.A.C. 7:27C-10.4(i) and the submission and approval of a monitoring and verification report under the provisions of (g) and (h) below, 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.

(b) If a project sponsor received a consistency determination pursuant to N.J.A.C. 7:27C-10.4(i), one CO_2 offset allowance will be awarded for each ton of reduction of CO_2 or CO_2 equivalent or sequestration of CO_2, represented by the relevant credits or allowances retired. If a credit or allowance is represented in metric tons, 1.1023 tons will be awarded for every metric ton, provided that total CO_2 offset allowances awarded shall be rounded down to the nearest whole ton.

(c) For CO_2 emissions offset projects undertaken prior to January 1, 2009, the project sponsor shall submit a monitoring and verification report covering the pre-2009 period by June 30, 2009.

(d) For CO_2 emissions offset projects undertaken on or after January 1, 2009, the project sponsor shall submit a monitoring and verification report within six months following the completion of the last calendar year during which the offset project achieved CO_2-equivalent emissions reductions or sequestration of CO_2 for which the project sponsor seeks the award of CO_2 offset allowances.

(e) For an offset project, a monitoring and verification report shall be submitted in a form prescribed by the Department and shall include:

1. The project's sponsor's name, address, e-mail address, telephone number, facsimile transmission number, and account number;

2. The CO_2 emissions reduction or CO_2 sequestration determination as required by the relevant provisions of N.J.A.C. 7:27C-10.5 through 10.9, including a demonstration that the project sponsor complied with the required quantification, monitoring, and verification procedures under N.J.A.C. 7:27C-10.5 through 10.9, as well as those outlined in the consistency application approved pursuant to N.J.A.C. 7:27C-10.4(i);

3. A signed certification statement by the project sponsor that reads "The undersigned project sponsor hereby confirms and attests that the offset project upon which this monitoring and verification report is based is in full compliance with all of the requirements of N.J.A.C. 7:27C-10. 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 N.J.A.C. 7:27C-10 is contingent on meeting the requirements of N.J.A.C. 7:27C-10. 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 any and all documentation relating to the offset project at the Department's request. I submit to the legal jurisdiction of the State of New Jersey.";

4. A certification signed by the offset project sponsor certifying that all offset projects for which the project sponsor has received CO_2 offset allowances under this subchapter (or corresponding provisions in the rules of other participating states), under the project 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 CO_2 Budget Trading Program in all participating states;

5. A verification report and certification signed by an accredited independent verifier that documents that the accredited independent verifier has reviewed the monitoring and verification report and evaluated the following in relation to the applicable requirements at N.J.A.C. 7:27C-10.5 through 10.9, and any applicable guidance issued by the Department:

i. The adequacy and validity of information supplied by the project sponsor to determine CO_2 emissions reductions or CO_2 sequestration pursuant to the applicable requirements at N.J.A.C. 7:27C-10.5 through 10.9;

ii. 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 at N.J.A.C. 7:27C-10.5 through 10.9 and as outlined in the consistency application approved pursuant to N.J.A.C. 7:27C-10.4(i);

iii. The adequacy and validity of information supplied by the project sponsor to demonstrate that the offset project meets the applicable eligibility requirements of N.J.A.C. 7:27C-10.5 through 10.9; and

iv. Such other evaluations and verification reviews as may be required by the Department;

6. Disclosure of any voluntary or mandatory programs, other than the CO_2 Budget Trading Program, to which greenhouse gas emissions data related to the offset project has been, or will be reported; and

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.

(f) Following the receipt of a monitoring and verification report pursuant to (c) or (d) above, the Department will determine whether the report is complete for the purposes of commencing review. In no event shall a completeness determination prevent the Department from requesting additional information needed by the Department to approve or deny the submitted monitoring and verification report.

(g) The Department will only accept a monitoring and verification report for an offset project for which the Department has issued a consistency determination pursuant to N.J.A.C. 7:27C-10.4(i).

(h) The Department will approve or deny a complete monitoring and verification report within 45 days following receipt of a complete report.