



STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP USE ONLY	
Town No.:	_____
Premise No.:	_____
Client No.:	_____
Sequence No.:	_____
CADIS Tracking No.:	_____

NOx Compliance Plan Form RCSA Section 22a-174-22(m)

Please complete this form in accordance with the instructions (DEP-AIR-INST-XXX) to ensure the proper handling of your compliance plan. Print or type unless otherwise noted.

Part I: Premises Information

1. Premises Name:
 Premises Street Address or Description of Location:
 City/Town: _____ State: _____ Zip Code: _____
 Business Phone: - - ext. _____ Fax: - - _____
 Contact Person: _____ Title: _____

3. Premises location ozone attainment status:
 Severe Non-Attainment Area for Ozone
 Serious Non-Attainment Area for Ozone

4. Applicability. Check all that apply:

Premises actual NOx emissions greater than or equal to 25 tons per year in a severe non-attainment area for ozone in any calendar year since 1990.
 Actual NOx emissions (TPY): _____ Method/Mean: _____

Premises actual NOx emissions greater than or equal to 50 tons per year in a serious non-attainment area for ozone in any calendar year since 1990.
 Actual NOx emissions (TPY): _____ Method/Mean: _____

One or more emission units with actual NOx emissions greater than or equal to 137 pounds per day in a severe non-attainment area for ozone during the ozone season in any calendar year since May 31, 1995.
 Actual NOx emissions (lb/day): _____ Method/Mean: _____

One or more emission units with actual NOx emissions greater than or equal to 274 pounds per day in a serious non-attainment area for ozone during the ozone season in any calendar year since May 31, 1995.
 Actual NOx emissions (lb/day): _____ Method/Mean: _____

One or more boilers with a maximum capacity of 50 MMBtu/hr or more.

Part II: Owner/Operator Information

1. Corporation Name:
 Corporate Mailing Address:
 City/Town: State: Zip Code: -
 Contact Person: Title:
 Business Phone: - - ext. Fax: - -
 E-mail Address:

2. Attorney or other representative, if applicable:
 Attorney: Title:
 Firm Name:
 Mailing Address:
 City/Town: State: Zip Code: -
 Business Phone: - - ext. Fax: - -

4. List any engineer(s) or other consultant(s) employed or retained to assist in preparing the compliance plan or is responsible for environmental reporting. Please enter a check mark if additional sheets are necessary, and label and attach them to this sheet.

Company Name:
 Contact Person: Title:
 Mailing Address:
 City/Town: State: Zip Code: -
 Business Phone: - - ext. Fax: - -
 Service Provided:

Part III: Compliance Plan Elements

1. Enter a check mark in the appropriate box identifying the applicable plan elements. (check all that apply):

A demonstration that all affected emission units are in compliance with the applicable emission limitation(s) in RCSA Section 22a-174-22(e).

A demonstration that it is not technically or economically feasible for one or more emission units to comply with the applicable emission limitations in RCSA Section 22a-174-22(e).

A proposal to use NOx allowances and NOx discrete emission reduction credits (DERCs).

A proposal to generate NOx DERCs.

A *modification* of an approved compliance plan.
 Compliance Plan approval date:

2. Effective Date: From: To:

Part V: Control Strategy Evaluation

NOx Control Strategies Summary. Include documentation in support of control strategy summary as Attachment A.

EMU#	Low-NOx Burner	Overfire Air	Flue Gas Recirculation	Natural Gas Reburn	Burners Out of Service	Selective Catalytic Reduction	Selective NonCatalytic Reduction	NonSelective Catalytic Reduction	3 Way Catalyst	Water Injection	Dry Low-NOx	Alternative Fuels	Retarded Ignition Timing	Other ¹	Seeking Approval of Trading Protocol (Y/N)

DRAFT

Note:
 1. For example: fuel change, decrease in hours of operation, capacity decrease.

“F” = feasible
 “T” = technically infeasible
 “EI” = economically infeasible

Part VI: NOx Emissions Reduction Trading Protocol

1. Formal Request:

I, _____, request that _____ participate in the NOx emissions reduction trading program.

Initials: _____ Date: _____

2. Identification of participating emission units.

List information for each emission unit that you are requesting to have participate in the NOx emissions reduction trading program.

EMU#	Peaking Unit (Y/N)	Continuous Emissions Monitor (Y/N)	Proportioned Baseline Emission Rate (BER)	Allowable Emission Limit (AEL)	Allowance/DERC Use Calculation Formula ¹	Proposed Full Load Emission Rate ² (FLER)	Annual NOx Trading Retirement Deadline (Month, Day)

Notes:

1. Use letter corresponding to the equations in RCSCA 22a-127-22(j)(7)(A) through (E). Include any supporting NOx allowance/DERC use calculation methodology as Attachment B, if applicable.
2. If applicable. Include emissions testing documentation and calculations supporting the proposed FLER as Attachment C.

3. Heat Input.

Include a detailed methodology for determining and recording monthly, daily, or seasonal heat input (as applicable) as Attachment D.

4. NOx DERCs Creation.

Include a justification for how the owner or operator will achieve emissions reductions that constitute an actual emissions rate below the lower of allowable and previous actual emissions rate as Attachment E.

Submit requests for approval of all NOx DERCs generated in writing to the commissioner. Compile requests on a monthly or non-ozone season basis and submit them at least on an annual basis.

5. NOx Allowance/DERCs Use.

Retire all NOx allowances and DERCs used in a calendar year by the annual NOx trading retirement deadline date in the following year to avoid a penalty.

Part VII: Supporting Documents

Please enter a check mark by the attachments as verification of which attachments have been submitted with this registration form.

<input type="checkbox"/> Attachment A: NOx Control Strategies Documentation
<input type="checkbox"/> Attachment B: Methodology for Calculating NOx Allowance/DERC Use
<input type="checkbox"/> Attachment C: FLER Emissions Testing Documentation
<input type="checkbox"/> Attachment D: Heat Input
<input type="checkbox"/> Attachment E: NOx DERCs Creation Calculations
<input type="checkbox"/> Attachment F: Other: _____

Part VIII: Certification

This certification shall be signed by a responsible corporate officer or a duly authorized representative of such officer, as those terms are defined in RCSA Subsection 22a-430-3(b)(2) and by the individual(s) delegated by such officer with the responsibility of actually preparing the compliance plan. The form will be considered incomplete unless all required signatures are provided.

<p>"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief.</p> <p>I understand that any false statement made in the submitted information may be punishable as a criminal offense, under Section 22a-175 of the Connecticut General Statutes, under Section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute.</p> <p>I certify that this submittal is on complete and accurate forms as prescribed by the commissioner without alteration of the text."</p>	
_____ Signature of Owner or Operator	____ / ____ / ____ Date
_____ Name of Owner or Operator (print or type)	_____ Title (if applicable)
_____ Signature of Preparer	____ / ____ / ____ Date
_____ Name of Preparer (print or type)	_____ Title (if applicable)
<input type="checkbox"/> Please enter a check mark if additional signatures are necessary. If so, please reproduce this sheet and attach signed copies to this sheet.	

Submit the NOx Compliance Plan Form and all Supporting Documents to:

STATIONARY SOURCE CONTROL GROUP

DEP USE ONLY

Commissioner Approval

The above NOx Compliance Plan submittal, submitted pursuant to RCSA Section 22a-174-22(m) on
by has been:

- Approved
- Deemed Insufficient. Insufficiency:
- Rejected. Deficiency:

CADIS Tracking Number:

Commissioner or Commissioner's Designee

Date



STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NO_x Compliance Plan Instructions

Introduction

Under the Regulations of Connecticut State Agencies (RCSA) section \S 22a-174-22 Control of Nitrogen Oxides (NO_x) Emissions Regulations, an owner or operator of an emission unit (EMU) subject to RCSA \S 22a-174-22(m) is required to submit a written compliance plan, certified in accordance with RCSA \S 22a-174-2a(a) documenting how the owner/operator will comply with all applicable requirements of RCSA \S 22a-174-22 on and after May 1, 2009. These instructions are meant to provide guidance while completing the NO_x compliance plan.

NO_x Compliance Plan Submittal Deadlines and Address

For emission units or premises subject as of the effective date of the 2007 amendments to \S 22a-174-22 of the RCSA, the owner or operator shall submit the compliance plan on or before November 1st, 2008.

Thereafter, for emission units or premises subject after the effective date of the 2007 amendments to \S 22a-174-22 of the RCSA the owner or operator shall have one year from becoming subject to submit such plan to the Stationary Source Control Group in writing. When complete, please send one copy with original signatures to the following address:

**Stationary Source Control Group
Bureau of Air Management
CTDEP
79 Elm Street
Hartford, CT 06106-5127**

Part I - Premises Information

1. Premises Name - Indicate the name of the premises.

Premises Address - Indicate the site address of the facility. If there is no address, give a brief description of the premises location.

Contact Person - Indicate the name and title of the premises contact person who is responsible for environmental reporting.

Contact Phone/FAX/e-mail - Indicate the phone number, FAX number, and email address of the person identified above.

2. Location Ozone Attainment Status - Check whether the premises is located in a serious or severe non-attainment area for ozone as defined in the RCSA.

3. Applicability - RCSA \S 22a-174-22(b) requires that owners and operators comply with subsections (d) through (n) for the certain premises and/or emission units. Indicate each applicability threshold that applies:

- Actual premises with NO_x emissions \geq 25 tpy in a severe non-attainment area for ozone in any calendar year since 1990.
- Actual premises with NO_x emissions \geq 50 tpy in a serious non-attainment area for ozone in any calendar year since 1990.
- Actual emission unit with NO_x emissions \geq 137 lbs/day in a severe non-attainment area for ozone during the ozone season in any calendar year since May 31, 1995.

- Actual emission unit with NOx emissions \geq 274 lbs/day in a serious non-attainment area for ozone during the ozone season in any calendar year since May 31, 1995.
- Boiler with a maximum capacity of 50 MMBtu/hr or more.

Actual Emissions - Indicate actual emissions in tons per year (tpy) or maximum lbs/day during the ozone season, as applicable, to determining regulatory applicability.

Method(s)/ Means Used to Determine

Applicability—Indicate the method/ means used to determine applicability of the regulation. Example responses are “Continuous Emissions Monitoring (CEM), stack test, calculations using manufacturer’s emissions test data, calculations using material balance, calculations using AP-42 emission factors, operating record review, manufacturers nameplate capacity, permitted or registered capacity, or demonstrated capacity.”

Part II - Owner/Operator Information

1. Corporation Name—Indicate the name of the parent corporation for the subject premises.

Corporation Mailing Address—Indicate the corporate mailing address.

Corporate Contact Person—Indicate the name and title of the corporate contact person who is responsible for environmental reporting.

Contact Phone/FAX/email—Indicate the phone number, FAX number, and email address of the person identified above.

2. Attorney or other representative – Indicate if applicable. Indicate the name, title, and affiliation of the attorney or other representative of the corporation who is responsible for environmental reporting.

Address/Phone/FAX/email—Indicate the mailing address, phone number, FAX number, and email address of the person identified above.

4. Engineer or other consultant – Indicate if applicable. Provide company name of all engineering or consulting firms employed or retained to assist in preparing the compliance plan or who are responsible for environmental reporting. Attach additional sheets as needed. Label any attached sheets with the owner/operator corporate name, premises name and address, and the title “Engineering/Consultant Contacts.”

Contact Name – Indicate the name and title of primary engineer or consultant firm contact.

Address/Phone/FAX/email—Indicate address, phone number, FAX number, and email address of the person identified above.

Part III - Compliance Plan Elements

Enter a check mark in the appropriate box(s) identifying the plan elements included in this compliance plan:

For all subject premises - Check either a demonstration that all affected emission units are in compliance or that it is not feasible to comply.

For all requesting trading - Check a proposal to use NOx allowances or NOx DERCs and/or to create NOx DERCs.

For all modifications - Check a modification of an approved compliance plan.

Requested Effective Date(s) - Indicate the date that is requested to be the effective date. This will generally be May 1, 2009, unless a new emission unit or premises becomes subject after the effective date of the 2007 amendments to § 22a-174-22 of the RCSA. If the owner or operator is intending to create NOx DERCs, or use NOx allowances or NOx DERCs, the end date will generally be December 31, 2011. For other owners and operators there will not generally be an end date unless specifically requested by the owner or operator.

Part IV - Emission Units Summary

In this section, you will list your facility's NO_x subject emission units and indicate the method of compliance with the applicable emission limitation. If an individual emission unit is causing the applicability identified in Part 2, then only that particular emission unit is the subject emission unit. If the applicability identified in Part 2 is caused by the actual NO_x emissions from the premises, then all NO_x emitting units on the premises are potentially subject to some requirements in the regulation.

TABLE 1

Emission Unit Number (EMU#)- Facilities that have applied for a Title V Operating Permit or a General Permit to Limit Potential to Emit (GPLPE) have previously associated an EMU number with each source of regulated air pollutants. If this is the case, list the EMU number in this column.

Source Description - Identify the boiler, furnace, incinerator etc. by make, model, and serial number. (e.g. - Cleaver Brooks, 600-250, AH3742; HB Smith, 460-12, 8743CC).

Air Bureau Registration or Permit Number - List the Air Bureau registration or permit number for the source if it is registered or permitted (found on the first page of your permit or registration.) Use the last four digits from your Air Bureau registration or permit number. Preface registrations with an "R" and permits with a "P". For example, registration 0127-0331 would become R0331. If there is no permit or registration number, show as NO.

EMU Maximum Capacity - Indicate the design maximum hourly capacity or highest demonstrated hourly capacity, whichever is greater, in MMBTU/hr for each subject emission unit.

CAIR O₃ Season Unit - Indicate (yes or no) if emissions unit is classified as a CAIR NO_x Ozone Season unit as defined in RCSA § 22a-174-22(a)(1).

Fuel Type(s) - Indicate the kind of fuel(s) burned in as specific a manner as possible (e.g. #6 oil, natural gas, waste oil, propane.) If multiple fuel types are used, indicate percentage of each used.

Inspection and Maintenance - Indicate (yes or no) if you have created an inspection and maintenance schedule pursuant to RCSA § 22a-174-22(n).

Record Keeping - Indicate (yes or no) if premises had established a procedure for making and keeping records pursuant to RCSA § 22a-174-22(l)(1).

Quarterly CEM Reports - Indicate (yes or no) if required to submit quarterly CEM report under RCSA § 22a-174-22(l)(4).

Annual Report Due Date - Indicate deadline date for submittal an annual report pursuant to RCSA § 22a-174-22(l)(6). Annual reports are due on or before July 30 of each year for a CAIR NO_x Ozone Season unit and on or before March 1 of each year for all other subject units.

TABLE 2

Emission Unit Number (EMU#)- List the EMU number as listed in Table 1 in this column.

Primary/Secondary Air Pollution Control System - If there are any air pollution controls, indicate the primary control system on the first line and the secondary control system on the second line. If the same control is used for more than one source, note that it is shared and identify the final control vent for all sources going through this control.

May 1, 2009 NO_x Emissions Limit - Indicate emission limit applicable on and after May 1, 2009 as specified in RCSA § 22a-174-22(e)(1), (2) and (3), include units as given.

Use Table 22-1, Effective on and after May 1, 2009 to determine applicable emissions limits for the following types of emission units:

- Gas Turbine engine with a maximum capacity of 5 MMBtu/hr or more

- Cyclone furnace with a maximum capacity of 5 MMBtu/hr or more
- Fast-response double-furnace Naval boiler with a maximum capacity of 5 MMBtu/hr or more
- Fluidized bed combustor with a maximum capacity of 5 MMBtu/hr or more
- Boiler with a maximum capacity of 5 MMBtu/hr or more but less than 50 MMBtu/hr
- Boiler with a maximum capacity of 50 MMBtu/hr or more but less than 250 MMBtu/hr
- Boiler with a maximum capacity of 250 MMBtu/hr or more
- Reciprocating engine with a maximum capacity of 3 MMBtu/hr or more

For any emission unit not listed in Table 22-1, use applicable limit listed in RCSA § 22a-174-22(e)(2).

For a CAIR NOx Ozone Season unit, the owner or operator shall not cause or allow emissions of NOx in excess of 0.15 lb/MMBtu during the period from October 1 to April 30, inclusive.

Emission Rate - Report actual NOx emission rate, if available. New units may calculate emission rate based on manufacturer's emissions test data or AP-42 emissions factors. Include units. Report in same units as emissions limit.

Emission Rate Determination Method - Indicate the method/means used to determine emissions rate. Example responses include: continuous emissions monitoring (CEM), stack test, calculations using manufacturer's emissions test data, or calculations using AP-42 emission factors.

NOx Emissions Measurement - If applicable, indicate source of actual emission rate data (i.e. stack test or CEM (continuous emissions monitoring)) by providing either:

- **CEM Calibration/Certification Date** - If the emissions unit is equipped with a continuous emissions monitor for NOx, provide the certification date or date the

monitor was last calibrated, whichever is later.

- **Stack Test Date** - If a DEP-approved stack test has been performed, list the most recent date.

Compliance with May 1, 2009 Emissions

Limit - For each subject emission unit, indicate (yes or no) if the owner or operator intends to be in continuous compliance with the emission limitation on and after May 1, 2009. If the owner or operator will employ a control strategy to comply, indicate the control strategy.

NOx Control Strategy Evaluation - Indicate (yes or no) if an NOx control strategy evaluation for emission unit has been submitted with this compliance plan. A control strategy evaluation must be submitted if requesting approval of an NOx emission reduction trading protocol or schedule modification.

Part V - NOx Control Strategy Evaluation For Emission Units

This part is only required if the owner or operator is requesting to use NOx allowances or NOx DERCs pursuant to the NOx emissions reduction trading protocol identified in Part 5 of this plan.

NOx Control Strategies Summary - Indicate for each of the applicable NOx control strategies whether or not it is feasible for the owner or operator to use such strategy in the particular setting in order to comply with the applicable emission limitation for the subject emission unit:

- "F" for a strategy that is feasible.
- "TI" for a strategy that is technically infeasible.
- "EI" for a strategy that is economically infeasible (i.e. cost greater than \$x,xxx per ton NOx removed.)
- "N/A" for not applicable.

Seeking Approval of Trading Protocol -

Indicate (yes or no) if seeking approval to use NOx allowances or NOx DERCs to meet emissions limitation.

Attachment A – NOx Control Strategy

Documentation - Documentation of control strategy feasibility study must be included if you are requesting approval of a NOx emissions reduction trading protocol.

Part VI - NOx Emissions Reduction Trading Protocol

This part is only required if the owner or operator is requesting to create approved NOx DERCs; or to use NOx allowances or NOx DERCs pursuant to the NOx emissions reduction trading protocol and has demonstrated in Part 4 of this plan that it is not feasible for the owner or operator to use any control strategy in the particular setting in order to comply with the applicable emission limitation for the subject emission unit. RCSA § 22a-174-22(j)(3)(A) – (G) requires the submission of this NOx emissions reduction trading protocol for creation or use for each subject emission unit.

- 1. Formal request** - Fill in owner/operator name and premises name of facility requesting authorization to create NOx DERCs, use NOx allowances or NOx DERCs, or both through participation in the NOx emissions reduction trading program. Initial and date formal request.
- 2. Identification of all participating units** - List in the table the requested information for each emission unit that you are requesting to have participate in the NOx emissions reduction trading program.

Peaking Unit - Indicate (yes or no) if the unit is a peaking unit as defined in RCSA § 22a-174-22(a)(15).

Continuous Emissions Monitor - Indicate (yes or no) if the unit is equipped with a continuous emissions monitor for NOx.

Proportioned Baseline Emission Rate

(BER) – Provide a proportioned baseline emission rate for approval in lb/MMBtu to be used in calculating actual NOx DERC created, if applicable. Calculate the BER by 1) multiplying the heat input of each fuel combusted by the baseline emission rate(s) for the fuel, 2) summing those products, and 3) dividing the sum by the total heat input. The baseline emission rate during the non-ozone season shall be the lower of 0.15 lb/MMBtu or other applicable emission rate. Include emissions testing documentation and calculations supporting the proposed FLER as Attachment C.

Allowable Emission Limit (AEL) – This is the “May 1, 2009 NOx Emissions Limit” listed in Table 2. Include units as given.

Allowance/ DERC Use Calculation

Formula - Identify formula to be used to calculate NOx Allowances or NOx DERCs used. Use letter corresponding to the equations in RCSA 22a-127-22(j)(7)(A) through (E). If applicable, include any supporting documentation for NOx allowance/DERC use calculation as Attachment B.

Proposed Full Load Emission Rate (FLER)

– If used in calculating NOx Allowances or NOx DERCs used, provide proposed full load emissions rate (FLER) as defined in RCSA § 22a-174-22(a)(6). Include units that will be used in calculating NOx Allowances or NOx DERCs used. If applicable, include emissions testing documentation and calculations supporting the proposed FLER as Attachment D.

Annual NOx Trading Retirement Deadline

- Indicate deadline date for retiring NOx Allowances or NOx DERCs used pursuant to RCSA § 22a-174-22(j)(8)(B). NOx Allowances or NOx DERCs used must be retired on or before March 1 of each year for non-CAIR NOx Ozone Season units and on or before July 30 of each year for CAIR NOx Ozone Season units.

3. **Heat Input** - Include a detailed methodology for determining and recording monthly, daily, or seasonal heat input (as applicable) as Attachment D.
4. **NO_x DERCs Creation** - Include a justification for how the owner or operator will achieve emissions reductions that constitute an actual emissions rate below the lower of allowable and previous actual emissions rate as Attachment E.

Part VII - Supporting Documents

Check boxes next to any and all applicable attachments included as part of this submittal. When submitting any supporting documents, please label the documents with title as indicated in this part (e.g., "Attachment A, NO_x Control Strategies Documentation") and include premises name and address and the owner or operator's corporation name.

Attachment A- NO_x Control Strategies Documentation - Include the method/ means used to determine the infeasibility of the particular control strategy. Examples would be analysis by a consultant, manufacturer's specifications, reference to a technical or scientific journal, or some other source of expertise. Indicate the reason it is infeasible to use the particular control strategy if the owner or operator cannot meet the applicable emission

limitation on and after May 1, 2009 and is requesting the ability to comply through the approval of a NO_x emissions reduction trading protocol.

Attachment B –NO_x Allowances or NO_x DERCs Used Calculations - Identify formula to be used to calculate NO_x Allowances or NO_x DERCs used and include any supporting documentation, if applicable.

Attachment C - FLER Emissions Testing Documentation - Provide emissions testing documentation supporting the proposed full load emission rate (FLER) including date of testing.

Attachment D – Heat Input – Provide detail the methodology for determining heat input.

Attachment E - NO_x DERCs Creation Calculations - Include a justification for how you will achieve emissions reductions that constitute an actual emissions rate below the lower of allowable and previous actual emissions rate.

Attachment F – Other - Identify and provide other relevant documentation.

Part VIII - Certification

Refer to RCSA § 22a-430-3(b)(2), for guidance on who may sign the certification.