



BWP AQ 29 Clean Air Interstate Rule Permit Instructions & Supporting Materials

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Introduction

MassDEP *Permit Applications*, as well as *Instructions & Support Materials*, are available for download from the MassDEP Web site at mass.gov/dep in two file formats: Microsoft Word™ and Adobe Acrobat PDF™. Either format allows documents to be printed.

Instructions & Support Materials files in Microsoft Word™ format contain a series of documents that provide guidance on how to prepare a permit application. Although we recommend that you print out the entire package, you may choose to print specific documents by selecting the appropriate page numbers for printing.

Permit Applications in Microsoft Word™ format must be downloaded separately. Users with Microsoft Word™ 97 or later may complete these forms electronically.

Permitting packages in Adobe Acrobat PDF™ format combine *Permit Applications* and *Instructions & Support Materials* in a single document. Adobe Acrobat PDF™ files may only be viewed and printed without alteration. *Permit Applications* in this format may not be completed electronically.



BWP AQ 29 Clean Air Interstate Rule Permit Fact Sheet

1. What is the purpose of the Permit?

The purpose of MassDEP regulation 310 CMR 7.32 is to control emissions of nitrogen oxides (NO_x) during the summertime ozone control period (May - September of each year) by implementing the Clean Air Interstate Rule (CAIR) NO_x Ozone Season Allowance Trading Program beginning May 1, 2009. 310 CMR 7.32(8) requires all affected units to determine and report NO_x mass emissions from certified systems during the ozone season (May – September), beginning on May 1, 2008. In addition, CAIR NO_x Ozone season units with CEMS must report year round beginning January 1, 2008. To ensure that the NO_x mass emissions are determined on a consistent basis, 310 CMR 7.32(3)(b)1. requires submission of a CAIR permit application and output monitoring plan, and, for most measurement methodologies, certification test data for NO_x Allowance Trading Program certification. The MassDEP, in consultation with the US Environmental Protection Agency (US EPA), is responsible for approving the certification testing of all alternative monitoring systems.

2. Who must apply?

All facilities subject to 310 CMR 7.32(3)(a)1. must apply for the Permit.

3. What category should I apply under?

The Emissions Control Plan (ECP) category is BWP AQ 29. BWP AQ 29 is intended for all facilities subject to 310 CMR 7.32.

4. How do I submit a complete plan application?

For a complete CAIR permit application, you must submit the MassDEP Transmittal form (available from <http://mass.gov/dep/service/online/trasmfrm.shtml>), the BWP AQ 29 Permit Application form, and all applicable additional requirements stated in Section D of the Application form. As there is no application fee for this permit, do not check a box in section F of the MassDEP Transmittal form. The output monitoring plan must include the information specified in 310 CMR 7.32(3)(c)4. All hardcopy submittals should be sent according to the information provided in Question 8 below. An electronic copy of the application should be submitted to MassDEP via email to: Patricio.Silva@state.ma.us.

The completed CAIR permit application must be submitted by the source CAIR designated representative. Note that for sources subject to both the CAIR NO_x Ozone Season program and the Acid Rain Program (ARP), the ARP and CAIR designated representative must be the same person; the ARP and CAIR alternate designated representative must be the same person.

5. What other information should be considered when applying?

All units must submit Net Output Monitoring documentation with the application. The output monitoring documentation may be the same as that in the facility's 310 CMR 7.28 ECP approval net output tables I (and II for cogenerators), but must describe the method for quantification of net energy output, any inter-relationship between output monitoring systems and the equations used to calculate output for all CAIR NO_x Ozone Season units. For net thermal output systems, descriptions and justifications of each useful load shall be included.



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6. What are the application fees and deadlines?

There are no fees associated with the application. The deadline for submittals for existing CAIR NO_x Ozone Season units at CAIR sources is October 1, 2007. The permit application deadline for new CAIR NO_x Ozone Season units is at least 18 months before the date on which they commence commercial operation as defined in 310 CMR 7.32(1)(b)1.

As required by 310 CMR 7.32(2)(a)4., no CAIR permit can be issued, no emission data reports will be accepted, and no CAIR NO_x Ozone Season Allowance Tracking System account will be established for a CAIR NO_x Ozone Season unit at a CAIR source until EPA has received a complete certificate of representation under 310 CMR 7.32(2)(d) for a CAIR designated representative of the source and all units at the source. The CAIR certificate of representation and instructions are available at:

<http://www.epa.gov/airmarkets/business/docs/forms/designatedrepresentativeform.pdf>

CAIR NO_x Ozone Season sources required to have an Operating Permit shall also submit a CAIR permit renewal application under 310 CMR 7.32(3)(b)2. in accordance with MassDEP's Operating Permits regulations addressing permit renewal.

7. What are the fees and timelines?

BWP AQ 29 is not subject to 310 CMR 4.00 and therefore is not subject to fees and timelines established under that regulation.

8. What is the Primary Permit Location? What is the Reserve Copy Location?

Primary Permit Location:

Department of Environmental Protection
Air Quality Section
_____ * Regional Office

Reserve Copy Location:

Department of Environmental Protection
Bureau of Waste Prevention, Attn: Patricio Silva
1 Winter Street
Boston, MA 02108

*Find your region: <http://mass.gov/dep/about/region/findyour.htm>

9. What is the annual compliance fee?

There is no annual compliance fee specifically for this program.

10. What are the regulations that apply to these permits? Where can I get copies?

These regulations include, but are not limited to:

Massachusetts Air Quality Regulations, 310 CMR 7.00.



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Bureau of Waste Prevention – Air Quality
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Fact Sheet**

The state regulations may be purchased at:

State Bookstore (in State House)
Room 116
Boston, MA 02133
617-727-2834

State House West Bookstore
436 Dwight Street, Room 102
Springfield, MA 01103
413-784-1376

An unofficial copy of these regulations may also be obtained at <http://www.mass.gov/dep/air/laws/regulati.htm>

Federal Regulations:

Continuous Emission Monitoring Regulations, 40 CFR Part 75.

These may be purchased at:

U.S. Government Bookstore
Thomas P. O'Neill Building
Room 169
10 Causeway Street
Boston, MA 02222
617-720-4180

These regulations may be obtained through the federal government web site:

<http://www.gpoaccess.gov/cfr/index.html>



Massachusetts Department of Environmental Protection
Bureau of Waste Prevention – Air Quality

**BWP AQ 29 Clean Air Interstate Rule Permit
Application Completeness Check List**

- The MassDEP Transmittal Form (available from <http://mass.gov/dep/service/online/trasmfrm.shtml>) has been completed. As there is no application fee for this permit, do not check a box in section F of the MassDEP Transmittal form.
- All questions on the Application Form have been answered.
- The CAIR Designated Representative, or the Alternate Designated Representative, has signed Section B.
- All hardcopy information required in Section D has been included in the application package.
- One original and one copy have been made of all of the required hardcopy application materials.
- One electronic copy of the completed hardcopy application and attachments.

To submit the application package:

- Submit the electronic copy of the application to MassDEP by email to: Patricio.Silva@state.ma.us.
- Submit one of the hardcopy application materials along with one copy of the Transmittal Form to:

Department of Environmental Protection
_____ * Regional Office
Air Quality Control

* Find your region: <http://mass.gov/dep/about/region/findyour.htm>

Note that there is no fee associated with this application.

- Submit one copy of all hardcopy application materials and a copy of the Transmittal Form to:

Department of Environmental Protection
Bureau of Waste Prevention, Attn: Patricio Silva
1 Winter Street
Boston, MA 02108



Massachusetts Department of Environmental Protection
 Bureau of Waste Prevention – Air Quality
BWP AQ 29 Clean Air Interstate Rule Permit

Transmittal Number _____

Facility ID# (if known) _____

A. Facility Information

Important:
 When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Facility

 Name

 Street Address

 City

 State

 Zip Code

2. Facility ORIS Code

 ORIS Code

3. Unit Identification Numbers

 Unit ID#

 Unit ID#

 Unit ID#

 Unit ID#

 Unit ID#

 Unit ID#

 Unit ID#

 Unit ID#

 Unit ID#

 Unit ID#

4. Facility Contact Person

 Name

 Title

 Telephone Number

 Email Address

5. Facility Owner

 Owner or Corporation Name

 Telephone Number

 Email Address

6. Which type of BWP AQ 29 application are you filing?

New Facility

Renewal for Operating Permit Facility with Monitoring Remaining as in the Most Recent Approval

Renewal for Operating Permit Facility with Changes in Monitoring from Most Recent Approval

Revision to Most Recent Approval for Non-Operating Permit Facility



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B. Standard Permit Requirements

The facility's CAIR designated representative or alternate representative must sign and date the application certification after reviewing 310 CMR 7.32(1)(f) Standard requirements.

1. Permit requirements.

- a. The CAIR designated representative of each CAIR NO_x Ozone Season source shall:
 - i. Submit to the Department a complete CAIR permit application under 310 CMR 7.32(3)(c) in accordance with the deadlines specified in 310 CMR 7.32(3)(b); and
 - ii. Submit in a timely manner any supplemental information that the Department determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.
- b. The owners and operators of each CAIR NO_x Ozone Season source shall have a CAIR permit issued by the Department under 310 CMR 7.32(3) for the source and operate the source and the unit in compliance with such CAIR permit.

2. Monitoring, reporting, and recordkeeping requirements.

- a. The owners and operators, and the CAIR designated representative, of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 310 CMR 7.32(8).
- b. The emissions measurements recorded and reported in accordance with 310 CMR 7.32(8) shall be used to determine compliance by each CAIR NO_x Ozone Season source with the CAIR NO_x Ozone Season emissions limitation under 310 CMR 7.32(1)(f)
- c. The energy output measurements recorded and reported in accordance with 310 CMR 7.32(9) shall be used to determine CAIR NO_x Ozone Season allocations for each CAIR NO_x Ozone Season source under 310 CMR 7.32(5).

3. Nitrogen oxides ozone season emission requirements.

- a. As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_x Ozone Season allowances available for compliance deductions for the control period under 310 CMR 7.32(6)(e)1. in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x Ozone Season units at the source, as determined in accordance with 310 CMR 7.32(8).
- b. A CAIR NO_x Ozone Season unit shall be subject to the requirements under 310 CMR 7.32(1)(f)3.a. for the control period starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under 310 CMR 7.32(8)(a)2.a., b., c., or g. and for each control period thereafter.
- c. A CAIR NO_x Ozone Season allowance shall not be deducted, for compliance with the requirements under 310 CMR 7.32(1)(f)3.a., for a control period in a calendar year before the year for which the CAIR NO_x Ozone Season allowance was allocated.
- d. CAIR NO_x Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Ozone Season Allowance Tracking System accounts in accordance with 310 CMR 7.32(5), (6), and (7).



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B. Standard Permit Requirements (continued)

3. Nitrogen oxides ozone season emission requirements (continued).
 - e. A CAIR NO_x Ozone Season allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Ozone Season Trading Program. No provision of the CAIR NO_x Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 310 CMR 7.32(1)(e) and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.
 - f. A CAIR NO_x Ozone Season allowance does not constitute a property right.
 - g. Upon recordation by the Administrator under 310 CMR 7.32(5), (6), and (7), every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from a CAIR NO_x Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.
4. Excess emissions requirements. If a CAIR NO_x Ozone Season source emits nitrogen oxides during any control period in excess of the CAIR NO_x Ozone Season emissions limitation, then:
 - a. Owners and operators of the source and each CAIR NO_x Ozone Season unit at the source shall surrender the CAIR NO_x Ozone Season allowances required for deduction under 310 CMR 7.32(6)(e)4.a. and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law.
 - b. Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 310 CMR 7.32(1), the Clean Air Act, and applicable State law.
5. Recordkeeping and reporting requirements.
 - a. Unless otherwise provided, the owners and operators of the CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Department or the Administrator.
 - i. The certificate of representation under 310 CMR 7.32(2)(d) for the CAIR designated representative for the source and each CAIR NO_x Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 310 CMR 7.32(2)(d) changing the CAIR designated representative.
 - ii. All emissions monitoring information, in accordance with 310 CMR 7.32(8), provided that to the extent that 310 CMR 7.32(8) provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - iii. Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Ozone Season Trading Program.
 - iv. Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_x Ozone Season Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Ozone Season Trading Program.



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B. Standard Permit Requirements (continued)

5. Recordkeeping and reporting requirements (continued).

b. The CAIR designated representative of a CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall submit the reports required under the CAIR NO_x Ozone Season Trading Program, including those under 310 CMR 7.32(8).

6. Liability.

- a. Each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit shall meet the requirements of the CAIR NO_x Ozone Season Trading Program.
- b. Any provision of the CAIR NO_x Ozone Season Trading Program that applies to a CAIR NO_x Ozone Season source or the CAIR designated representative of a CAIR NO_x Ozone Season source shall also apply to the owners and operators of such source and of the CAIR NO_x Ozone Season units at the source.
- c. Any provision of the CAIR NO_x Ozone Season Trading Program that applies to a CAIR NO_x Ozone Season unit or the CAIR designated representative of a CAIR NO_x Ozone Season unit shall also apply to the owners and operators of such unit.

7. Effect on other authorities. No provision of the CAIR NO_x Ozone Season Trading Program, a CAIR permit application, a CAIR permit, or an exemption under 310 CMR 7.32(1)(e) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x Ozone Season source or CAIR NO_x Ozone Season unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, the Clean Air Act, or any other state regulation.

C. Certification

This form must be signed by the CAIR designated representative or alternate CAIR designated representative for the CAIR NO_x Ozone Season source. Note that for sources subject to both the CAIR NO_x Ozone Season program and the Acid Rain Program (ARP), the ARP and CAIR designated representative must be the same person; the ARP and CAIR alternate designated representative must be the same person.

“I am authorized to make this submission on behalf of the owners and operators of the source or 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.”

 Name of CAIR Designated Representative or Alternate

 Signature

 Date



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D. Additional Items

Check all applicable boxes and attach any required materials to this application.

Emissions Monitoring Plan

- Submitting Initial Certification to the U.S. Environmental Protection Agency (EPA) under 40 CFR Part 75. DO NOT submit your EPA certification to the Department.
- Exempt from Initial Certification Requirements:
Existing CAIR NO_x Ozone Season sources with emissions monitoring systems that have been previously certified in accordance with 40 CFR Part 75, and also meet the requirements of 310 CMR 7.32(8)(a)1. and 310 CMR 7.32(8)(b), are exempt from the initial certification requirements of 310 CMR 7.32(8)(b).
- Submitting Prior Approval for Review:
Existing CAIR NO_x Ozone Season sources with emission monitoring plans under 40 CFR Part 75 and checking “New” at Section A, Item 6 on Page 1 of this application form must submit any approved alternative monitoring system, alternative reference method, or any other alternative to the emission monitoring requirements of 310 CMR 7.32(8) to the U.S. Environmental Protection Agency (EPA) and MassDEP for review and written approval under 40 CFR Part 75.66 for use in the CAIR NO_x Ozone Season Trading Program.

Output Monitoring Documentation

Energy Output Monitoring Plan

- For existing CAIR NO_x Ozone Season units with approved 310 CMR 7.28 ECPs, submit the net output tables I (and II for cogenerators) with the energy output monitoring plan.

The energy output monitoring plan shall detail the method for quantification of net energy output, including:

- Text describing, at a minimum, any inter-relationship between output monitoring systems and the equations used to calculate output for all CAIR NO_x Ozone Season units. For net thermal output systems, descriptions and justifications of each useful load shall be included.
- A detailed description of all quality assurance/quality control activities that will be performed to maintain the output system in accordance with 310 CMR 7.32(9)(b). CAIR NO_x Ozone sources relying upon ISO New England Operating Procedure 18, Metering and Telemetering Criteria, and future amendments, for quality assurance/quality control activities should cite the current version of OP 18 in effect at the time of application, but should not attach a copy to the BWP AQ 29 application.
- 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 shall be either zero or an output value that is likely to be lower than a measured value.

Continued on next page.



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D. Additional Items (continued)

Schematic Diagrams of Net Output Monitoring

- Provide schematic diagram(s), accompanied by explanatory narrative text that include the following features where applicable:

Net Electric Output Monitoring

- For any CAIR NO_x Ozone Season unit monitoring net electric output, the diagram shall contain and identify all CAIR NO_x Ozone Season units and all generators served by each CAIR NO_x Ozone Season unit and the relationship between CAIR NO_x Ozone Season units and generators. If a generator served by a CAIR NO_x Ozone Season unit is also served by a non-CAIR unit, the non-CAIR unit and its relationship to each generator shall be indicated on the diagram as well. A key explaining all symbols and abbreviations used in the diagram must be attached. The diagram shall identify each location where the net electric output is measured and shall include all electrical inputs and outputs to and from the CAIR NO_x Ozone Season source. If net electric output is determined using a billing meter, the diagram shall identify each billing meter used to determine net sales of electricity and shall show that all electricity measured at the point of sale is generated by the CAIR NO_x Ozone Season units.

Net Thermal Output Monitoring

- For any CAIR NO_x Ozone Season unit monitoring net thermal output, the diagram shall include all steam or hot water coming into the net steam system, including steam from CAIR NO_x Ozone Season units and non-CAIR units, and all exit points of steam or hot water from the net steam system. In addition, each input and output stream shall have an estimated temperature, pressure and phase indicator, and an enthalpy in Btu/lb. The diagram of the net steam system shall identify all useful loads, house loads, parasitic loads, any other steam loads and all boiler feedwater returns. A key explaining all symbols and abbreviations used in the diagram must be attached. The diagram shall represent all energy losses in the system as either usable or unusable losses. The diagram shall 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.
- CAIR NO_x Ozone Season sources selling steam shall use billing meters to determine net steam output unless the Department approves an alternative method for quantification of net steam output. A CAIR NO_x Ozone Season source whose steam output is not measured by billing meters or whose steam output is combined with output from a non-CAIR unit prior to measurement by the billing meter shall propose to the Department an alternative method for quantification of net steam output. If data for steam output are not available, the CAIR NO_x Ozone Season source may report heat input providing useful steam output as a surrogate for steam output.