



Commonwealth of Massachusetts  
Executive Office of Energy & Environmental Affairs

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## **Background Information and Technical Support Document for Amendments to:**

**310 CMR 7.71**

**“Reporting of Greenhouse Gas Emissions”**

**Regulatory Authority:**

**M.G.L. c. 111, sections 142A through 142E, and M.G.L. c. 21N, section 2**

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## I. INTRODUCTION

MassDEP is proposing several amendments to 310 CMR 7.71 (Reporting of Greenhouse Gas Emissions). The changes include minor amendments and clarifications that will improve consistency with other reporting programs and clarify reporting requirements.

## II. BACKGROUND

In August 2008, Chapter 298 of the Acts of 2008, the Massachusetts Global Warming Solutions Act (GWSA), was passed by the legislature and signed into law by Governor Patrick to address the challenges of climate change. The Climate Protection and Green Economy Act (CPGEA)<sup>1</sup> is contained within the GWSA and requires the creation of enforceable state limits on greenhouse gas (GHG) emissions for the years 2020, 2030, 2040, and 2050. These limits are designed to address the Commonwealth's contribution to global climate change and to stimulate the green economy in Massachusetts.

The CPGEA explicitly requires MassDEP to adopt regulations that require reporting of GHG emissions by facilities that: 1) emit in excess of 5,000 tons of greenhouse gases in carbon dioxide equivalents<sup>2</sup> (CO<sub>2</sub>e) per year, or 2) report air emissions pursuant to Title V of the Clean Air Act and emit any amount of greenhouse gases. Creating an accurate inventory of statewide GHG emissions will enable effective planning, implementation and tracking of strategies to address the Commonwealth's contribution to climate change.

MassDEP adopted 310 CMR 7.71: *Mandatory Reporting of Greenhouse Gas Emissions to a Regional Registry* on December 29, 2008, to comply with the requirements of the CPGEA. The regulation requires that emissions be quantified in accordance with The Climate Registry's (TCR's) General Reporting Protocol (GRP). The Climate Registry is a non-profit organization that was created by states (including Massachusetts) to standardize GHG emissions reporting, and the GRP is a document that includes standardized methodologies that can be used to calculate GHG emissions from a variety of source categories.

In June 2009, MassDEP amended 310 CMR 7.71 to add sections on certification, voluntary reporting, and reporting by retail sellers of electricity. These amendments changed the title of the regulation to *Reporting of Greenhouse Gas Emissions*, and updated the reference to the GRP to the then most recent version. Because the United States Environmental Protection Agency (EPA) had not finalized its GHG reporting regulations as of June 2009, EPA's GHG reporting program was not referenced in the amended regulation. Since that time, TCR has issued updates to the GRP, EPA has promulgated GHG reporting regulations, and MassDEP has collaborated with TCR to create the MA GHG Registry, an electronic software platform that supports reporting and public release of emissions data reported pursuant to 310 CMR 7.71.

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<sup>1</sup> The Climate Protection and Green Economy Act (CPGEA) is codified at M.G.L. c. 21N. It can be found at: <http://www.mass.gov/legis/laws/seslaw08/sl080298.htm>

<sup>2</sup> Carbon dioxide equivalents (CO<sub>2</sub>e) means that for gases other than carbon dioxide, the number of tons of emissions is adjusted to account for differing global warming potentials.

MassDEP is proposing amendments to 310 CMR 7.71 to improve consistency among MassDEP's GHG reporting program, TCR's most current GRP, and US EPA's GHG reporting program. MassDEP is also proposing amendments to provisions that allow electricity sellers, when calculating their GHG emissions, to identify specific generators whose electricity they sell, instead of using default emission factors provided by MassDEP.

### **III. DESCRIPTION OF THE PROPOSED AMENDMENTS**

#### **A. Definitions: 310 CMR 7.71**

MassDEP is proposing to revise references to The Climate Registry's GRP and General Verification Protocol (GVP) to remove references to specific versions of those documents. Currently, the regulation requires reporters to use the referenced version of the GRP when calculating their GHG emissions. However, the GRP is revised occasionally as TCR and reporters gain more experience. In general, such revisions do not result in large changes in reported emissions, and result in more accurate emissions calculations. Therefore, by deleting references to specific versions of these documents, MassDEP is proposing to allow, but not require, reporters to quantify emissions in accordance with the version of the GRP that is published by The Climate Registry at the time of reporting. The purpose of this proposed revision is to allow reporters to use the most up to date methodologies and emissions factors that are available for use in the MA GHG Registry electronic reporting system. Using the most recent available methodologies may also improve consistency between data in the MA GHG Registry and data reported to other programs, furthering the statutory objective of creating a "regional registry." Although this may result in reporters using slightly different reporting protocols, given the flexibility in how GHG emissions can be reported under the current regulation, MassDEP does not believe that this will be a significant issue with respect to consistency of emissions reports.

MassDEP is proposing to amend the definition of "stationary emission source" to clarify that all sources of greenhouse gases emissions located at the facility, including portable equipment, are considered stationary emission sources for the purpose of reporting GHG emissions pursuant to 310 CMR 7.71, if they are not motor vehicles. Examples of portable sources of greenhouse gas emissions that may be included in this definition include, but are not limited to, portable welders, generators, and refrigeration units that are not-self-powered but can be moved to different locations. Self-powered sources of emissions, such as forklifts and construction equipment, are considered motor vehicles.

MassDEP has received questions about reporting of GHG emissions from the natural gas networks that are owned or operated by natural gas transmission companies, local distribution companies, or independent municipally-owned gas distribution systems. Transmission pipelines and compressors are examples of natural gas containing equipment that can leak, and whose emissions, in combination with other interconnected natural gas containing equipment operated by a company, must be reported if in excess of 5000 tons of CO<sub>2</sub>e annually. Other examples of such equipment include customer meters and the service lines leading from the street to customer meters, both of which are owned and operated by the company providing the natural gas to the end-use customer. To clarify that interconnected natural gas containing equipment is considered

part of a natural gas facility whose emissions must be reported if in excess of 5000 tons of CO<sub>2</sub>e annually, MassDEP is proposing to add a definition of “natural gas facility” that includes specific examples of such equipment. The goal of Massachusetts’ GHG reporting program is to obtain accurate emissions reports from Massachusetts’ GHG sources to inform stakeholders about the sources of GHG emissions. Therefore, it is important that GHG emissions from natural gas facilities be reported. Facilities are encouraged to contact MassDEP to discuss specific cases in which a single company would prefer to aggregate multiple facilities for convenience, and cases in which air emissions from equipment that is part of a larger facility are already being reported separately to MassDEP under 310 CMR 7.71 or another emissions reporting program.

**B. Applicability: 310 CMR 7.71(3)**

MassDEP is proposing a minor change to 310 CMR 7.71(3)(b)1.c. to improve consistency between the general applicability requirements and the exemption provision for facilities that demonstrate that they are unlikely to emit more than 5,000 short tons during any future year.

MassDEP is also proposing to correct a typographical error in 310 CMR 7.71(3). Specifically, 310 CMR 7.71(3)(c) includes an incorrect reference to 310 CMR 7.71(a)2.; the correct reference is to 310 CMR 7.71(3)(a)2.

**C. Annual Reporting by Facilities that Emit Greenhouse Gases: 310 CMR 7.71(5)**

MassDEP is proposing to eliminate the requirement to quantify emissions in accordance with a Tier A methodology “to the extent practicable.” The reasons for this change are that TCR announced the elimination of data tiers in its most recent list of updates and clarifications to the GRP,<sup>3</sup> and the electronic MA GHG Registry does not distinguish methodologies by tier. Going forward, all methodologies included in the GRP will be considered to be sufficiently accurate; however, MA facilities are encouraged to utilize the most accurate applicable methodology to report emissions to MA GHG Registry.

MassDEP is proposing a new requirement that would apply to facilities that are required to report emissions pursuant to EPA’s new GHG reporting regulation (40 CFR Part 98). Under this new requirement, facilities that report emissions from a particular piece of equipment or emissions source pursuant to 40 CFR Part 98 will be required to utilize the same methodology to quantify emissions for the purpose of reporting the same emissions to MassDEP. This requirement will increase compatibility between the MA GHG Reporting program and US EPA’s database. In many cases, this requirement will result in the same quantities of emissions being reported to both programs. However, there will be cases in which reported emissions will not be identical because, for example, the two programs differ with regard to facility definitions and rules related to aggregating emissions from multiple emissions units. In addition, all MA facilities are encouraged to utilize methodologies included in 40 CFR Part 98.

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<sup>3</sup> See “GRP Update and Clarifications,” August 18, 2010, available at <http://www.theclimaterestry.org/resources/protocols/general-reporting-protocol/>.

MassDEP is proposing to include language in 310 CMR 7.71(5) to establish that the filing of a report pursuant to 310 CMR 7.71(5) on or after January 1, 2011 establishes a regulated facility as an ongoing registered reporter.

**D. Requirements for Certification, Recordkeeping, and Public Release: 310 CMR 7.71(6)**

MassDEP is proposing to amend the certification requirements to clarify that the report must be certified by a responsible official of a reporting entity. The definition of “responsible official” is contained in 310 CMR 7.00: *Definitions*, and is the same definition that applies in the source registration program, 310 CMR 7.12. Note that regardless of who signs the certification statement, all entities that own, operate, or control a facility are responsible for ensuring that emissions from the facility are reported in accordance with 310 CMR 7.71.

**E. Voluntary Reporting by Facilities: 310 CMR 7.71(8)**

MassDEP is proposing to eliminate the title “voluntary compliance” to eliminate any potential for confusion between voluntary reporting and compliance with regulatory requirements.

MassDEP is also proposing to correct a typographical error in 310 CMR 7.71(8). Specifically, 310 CMR 7.71(8)(a) includes an incorrect reference to 310 CMR 7.71(5)(i).; the correct reference is to 310 CMR 7.71(5)(j).

**F. Reporting Requirements for Retail Sellers of Electricity: 310 CMR 7.71(9)**

MassDEP is proposing several amendments to provisions that require retail sellers of electricity to report emissions that occur when the power they sell is generated. In general, retail sellers are allowed to use default emission factors provided by MassDEP. However, retail sellers are also allowed to submit optional documentation showing that some portion of the electricity they sell was generated from a particular power plant. In such cases, actual emissions from specific power plants, which may be equal to zero for some generators, are reported for the corresponding portion of electricity sold. The first two amendments listed below address these optional submissions.

The first of these amendments would revise provisions of 310 CMR 7.71(9)(d)6.b. that apply only to retail sellers of electricity subject to the MA Department of Energy Resources’ (DOER’s) Renewable Portfolio Standard (RPS) regulations, and only to the optional reporting of megawatt-hours (MWh) that are eligible to be used for RPS compliance and were generated by generators with non-zero GHG emissions. It has been brought to the Department’s attention that 310 CMR 7.71(9) only allows reporting of such megawatt hours if the retail seller retires certificates from the regional certificate-tracking system, and has a contract for the associated electricity. In contrast, for RPS-eligible MWh generated by non-emitting generators, the regulation requires only that certificates be retired. The Department has concluded that retirement of RPS-eligible emitting certificates is sufficient to demonstrate use of the power reported, and is therefore, proposing to eliminate the requirement to submit contracts to document purchases of RPS-eligible electricity from generators with non-zero emissions, so that emitting and non-emitting

generators are treated similarly. Note that the requirement to submit contracts when reporting MWh that are *not* RPS-eligible remains in place, and continues to apply to all retail sellers that report emissions from generators that they do not own.

The second of these amendments would revise 310 CMR 7.71(9)(d)6.c., and applies only to retail sellers that are not subject to DOER's RPS regulations. In the first year of implementation of optional reporting by municipal retail sellers, it became clear that the regulation allows two parties to report the use of the same MWh, if the MWh are from generators not owned by the municipality.<sup>4</sup> For MWh from generators that are owned by municipalities, the regulation prevents double counting by requiring municipalities choosing to submit the optional report to also submit a New England Power Pool Generation Information System report showing that the certificates associated with the MWh of electricity were not claimed by another party, such as another retail seller or generator (specifically, by "showing that the certificates associated with the ... megawatt hours of electricity were Unsettled Certificates whose attributes were aggregated in Residual Mix Certificates"). For MWh from generators that are not owned by municipalities, there is no corresponding regulatory provision that prevents double counting. To correct this double counting problem, the Department proposes to require municipal retail sellers to submit the New England Power Pool Generation Information System report for MWh from generators not owned by municipalities. The Department seeks comment on whether municipal retail sellers will have any difficulty obtaining the required report from the owner of the generator.

MassDEP is also proposing to amend the certification requirements for retail sellers to clarify that the report must be certified by a responsible official of a reporting entity. The definition of "responsible official" is contained in 310 CMR 7.00: *Definitions*, and is the same definition that applies in the source registration program. Note that regardless of who signs the certification statement, all entities that own, operate, or control a facility are ultimately responsible for ensuring that emissions are reported in accordance with 310 CMR 7.71.

In addition, MassDEP is proposing to add language to 310 CMR 7.71(9) to establish that once a retail seller files a report pursuant to 310 CMR 7.71(9) on or after January 1, 2011, the retail seller is a registered reporter.

MassDEP is also proposing to modify 310 CMR 7.71(9) to specify that competitive suppliers do not become subject to the requirement to report GHG emissions until the first reporting year in which they sell electricity in Massachusetts after becoming licensed by the DPU. A GHG report would be due for every reporting year thereafter in which the competitive supplier continues to hold a license from DPU, regardless of whether any electricity is actually sold in a given year. If the competitive supplier discontinues its DPU license, then starting with the first full year in which it could not sell electricity in Massachusetts, it would not submit an annual GHG report.

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<sup>4</sup> Although this did occur in an initial optional submittal by one municipality, the municipality chose to amend its submittal to exclude such MWh.

Lastly, MassDEP is proposing to correct a typographical error in 310 CMR 7.71(9)(d)6.c.i. Specifically, a reference to “non-emitting megawatt hours” is being corrected to refer to “emitting megawatt hours.”

#### **IV. ECONOMIC IMPACTS**

The proposed amendments are clarifications and updates that are not expected to have impacts on the costs of the program.

#### **V. SMALL BUSINESS IMPACT STATEMENT**

The proposed amendments are not expected to have any negative impact on small businesses. The proposal includes clarifications and updates to the existing regulation that will not increase the regulatory burden on facilities. Furthermore, the program is a reporting-only program that does not include any requirement to reduce emissions, and the applicability provisions in the regulation do not require reporting by smaller facilities that do not exceed the 5,000 ton threshold or report air emissions pursuant to Title V of the federal Clean Air Act.

#### **VI. AGRICULTURAL IMPACTS**

Pursuant to Massachusetts General Laws, Chapter 30A, Section 18, state agencies must evaluate the impact of proposed programs on agriculture within the Commonwealth. The proposed amendments are clarifications and updates that are not expected to have any negative impacts on agricultural production in Massachusetts.

#### **VII. IMPACT ON MASSACHUSETTS MUNICIPALITIES**

The proposed amendments are clarifications and updates that will not negatively affect cities or towns.

#### **VIII. MASSACHUSETTS ENVIRONMENTAL POLICY ACT (MEPA)**

Pursuant to 301 CMR 11.03(12) (MEPA Regulations), these proposed regulatory amendments will not reduce standards for environmental protection, opportunities for public participation in permitting or other review processes, or public access to information generated or provided in accordance with these regulations. Promulgation of these regulatory amendments, therefore, does not require the filing of an Environmental Notification Form under MEPA.

#### **IX. IMPACTS ON OTHER PROGRAMS – AIR TOXICS**

Air toxics are a group of chemical air contaminants that are associated with significant environmental impacts or adverse health effects such as cancer, reproductive effects and birth defects. The federal Clean Air Act requires EPA to promulgate source-specific controls based on Maximum Achievable Control Technologies (MACT) for air toxics. MassDEP implements MACT standards as EPA promulgates them. In addition, MassDEP controls air toxics through reductions of criteria pollutants and through its Toxics Use Reduction Program. Toxics use

reduction is a MassDEP priority. Toxics use reduction is defined as in-plant practices that reduce or eliminate the total mass of contaminants discharged to the environment. The proposed amendments to the regulations are clarifications and updates that will not affect toxics.

## **X. REQUEST FOR COMMENTS**

MassDEP requests comments on the amendments to 310 CMR 7.71 proposed in this document. MassDEP does not intend to modify any other provisions of 310 CMR 7.71 at this time.

## **XI. PUBLIC PARTICIPATION**

MassDEP now gives notice and is providing the opportunity to review the proposed amendments to 310 CMR 7.71: *Reporting of Greenhouse Gas Emissions*, the background document, and any technical information. A public hearing is scheduled for Tuesday, August 9, 2011, and will be held in accordance with the procedures of MGL Chapter 30A.

A copy of 310 CMR 7.71 and this background document are available on MassDEP's website at: <http://www.mass.gov/dep/>. Copies can also be obtained at MassDEP's headquarters at One Winter Street, Boston.

MassDEP requests that written comments be submitted electronically via e-mail to: [climate.strategies@state.ma.us](mailto:climate.strategies@state.ma.us).

Written comments may also be sent to: Loreen Kelley, Department of Environmental Protection, Bureau of Waste Prevention, One Winter Street, Boston, MA 02108.

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