



Commonwealth of Massachusetts  
Executive Office of Energy & Environmental Affairs

# Department of Environmental Protection

One Winter Street Boston, MA 02108 • 617-292-5500

Charles D. Baker  
Governor

Karyn E. Polito  
Lieutenant Governor

Kathleen A. Theoharides  
Secretary

Martin Suuberg  
Commissioner

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

**310 CMR 7.71**

**Reporting of Greenhouse Gas Emissions**

**and**

**310 CMR 7.75**

**Clean Energy Standard**

**(Reporting Requirements for Retail Sellers of Electricity)**

**July 9, 2021**

### **Regulatory Authority:**

**M.G.L. c. 21A, section 16, M.G.L. c. 111, sections 2C, 142A through 142E, and M.G.L. c. 21N, sections 2, 3(c)**

**This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.**

**TTY# MassRelay Service 1-800-439-2370**

MassDEP Website: [www.mass.gov/dep](http://www.mass.gov/dep)

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## I. SUMMARY

The Massachusetts Department of Environmental Protection (MassDEP) is proposing amendments to 310 CMR 7.71: *Reporting of Greenhouse Gas Emissions* and 310 CMR 7.75 *Clean Energy Standard*. The amendments to 310 CMR 7.71 will (1) improve consistency between MassDEP's greenhouse gas (GHG) reporting program for facilities and the United States Environmental Protection Agency's (EPA's) GHG reporting program, (2) accurately document the transition of the greenhouse gas reporting program to a new MassDEP electronic reporting platform, and (3) remove unnecessary reporting requirements that have been identified as particularly burdensome for facilities. To provide consistency with the EPA program, MassDEP is proposing to replace the requirement to quantify emissions in accordance with the General Reporting Protocol (GRP) with a requirement to utilize methods specified in 40 CFR Part 98. The amendments to 310 CMR 7.75 *Clean Energy Standard* will add a reporting option for municipally-owned retail electricity sellers and clarify the authority of MassDEP to require certain reporting be directly to the Massachusetts Department of Energy Resources.

## 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 to address the challenges of climate change. In March 2021, Chapter 8 of the Acts of 2021, An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy, was signed into law. A part of the GWSA, codified at M.G.L. c. 21N (and amended by Chapter 8 of the Acts of 2021), requires the Secretary to establish an enforceable state limit on GHG emissions for the year 2020 and additional years.<sup>1</sup> These limits are designed to address the Commonwealth's contribution to global climate change and to stimulate the green economy in Massachusetts.

M.G.L. c. 21N explicitly requires MassDEP to adopt regulations that require reporting of GHG emissions by facilities that: 1) emit in excess of 5,000 short 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 federal Clean Air Act and emit any amount of GHGs. A separate section of M.G.L. c. 21N requires MassDEP to create an accurate inventory of statewide GHG emissions.

On December 29, 2008 MassDEP adopted 310 CMR 7.71 to comply with the requirements of the M.G.L. c. 21N, § 2(a). The regulation requires that emissions be quantified in accordance with The Climate Registry's (TCR's) GRP. TCR 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.

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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>, and the 2021 amendments can be found at <https://malegislature.gov/Laws/SessionLaws/Acts/2021/Chapter8>.

<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.

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*<sup>3</sup> and updated the reference to the GRP to the most recent version at that time. In 2012, MassDEP amended 310 CMR 7.71 to improve consistency among MassDEP's GHG reporting regulation, TCR's most current GRP, and EPA's GHG reporting regulation (40 CFR Part 98, which was finalized in October 2009 and subsequently amended several times). EPA's GHG reporting regulation includes over 40 subparts, each of which includes detailed reporting methods applicable to particular facility or source types.

One of the requirements of GWSA was that emissions be reported to a regional registry.<sup>4</sup> In order to meet this requirement, MassDEP collaborated with TCR to create the MA GHG Registry. This was an electronic reporting platform that was used by facilities to report emissions pursuant to 310 CMR 7.71, and the regulation referenced the TCR system. However, since the creation of the MA GHG Registry, EPA created a similar electronic registry called the Electronic Greenhouse Gas Reporting Tool (e-GGRT). Furthermore, MassDEP's contract with TCR to maintain the MA GHG Registry expired on June 30, 2016. In order to address the loss of the TCR system, MassDEP developed an online electronic data reporting platform that allows facilities to comply with 310 CMR 7.71, using the same electronic system (eDEP) that is used to report other air emissions pursuant to 310 CMR 7.12: *Source Registration*. Facilities have been using the eDEP system to report their GHG emissions to MassDEP. As proposed, the regulation would be compatible with federal and Massachusetts-only reporting options.

As noted above, 310 CMR 7.71, as amended in 2009, also included reporting requirements for retail electricity sellers.<sup>5</sup> These requirements address the GWSA requirement for "reporting of greenhouse gas emissions from generation sources producing all electricity consumed, including transmission and distribution line losses from electricity generated within the commonwealth or imported from outside the commonwealth; provided, however, that this requirement shall apply to all retail sellers of electricity, including electric utilities, municipal electric departments and municipal light boards..." Regulatory amendments finalized in 2017 moved these requirements to 310 CMR 7.75 *Clean Energy Standard*, beginning with reporting year 2018.

The reporting provisions of 310 CMR 7.75(9)(c) require each retail seller of electricity to annually report to MassDEP its megawatt hours sold, and associated GHG emissions released in the course of generating that electricity. MassDEP is proposing amendments to 310 CMR 7.75(9)(c) that would provide an additional option for municipal electric departments (MEDs) and municipal light boards (MLPs) to document use of clean energy.

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

MassDEP is proposing amendments to 310 CMR 7.71 to document the transition to the new eDEP reporting system that replaces the MA GHG Registry and is proposing to eliminate certain

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<sup>3</sup> The regulation was originally titled *Mandatory Reporting of Greenhouse Gas Emissions to a Regional Registry*.

<sup>4</sup> Chapter 8 of the Acts of 2021 amended Chapter 21N to delete the reference to a "regional" registry.

<sup>5</sup> Chapter 8 of the Acts of 2021 maintained the requirements for reporting by retail electricity sellers, including municipal electric departments and municipal light boards.

reporting requirements that (1) do not have applicable calculation methodologies listed in EPA's GHG reporting program (40 CFR Part 98), or (2) are burdensome for facilities and do not provide useful information to MassDEP. These amendments are consistent with the GWSA requirement to "review existing and proposed state, federal and international greenhouse gas emissions reporting programs and make reasonable efforts to promote consistency among the programs established pursuant to this chapter and other programs and to streamline reporting requirements on greenhouse gas emissions sources."<sup>6</sup>

#### **A. Definitions: 310 CMR 7.71(2)**

MassDEP is proposing to revise definitions to add references to EPA's GHG reporting regulations at 40 CFR Part 98 and to eliminate definitions that are not necessary.

The most significant of these changes would revise the definition of "stationary emission source" so that only emission sources for which 40 CFR Part 98 includes an applicable quantification method would be considered stationary emissions sources. Based on a review of 2009 - 2015 emissions reported under 310 CMR 7.71, MassDEP has identified the following emissions that would no longer be reported because of this change:

- Non-combustion biogenic carbon dioxide, such as emissions of carbon dioxide from the decay of organic material in landfills (less than 1.0% of reported emissions, mostly from landfills).
- Fugitive emissions of refrigerants, such as leakage from refrigerators and air conditioners (less than 0.3% of reported emissions, including emissions from a large number of facilities). Because of the large number of small refrigerators and air conditioners at facilities, this is a particularly burdensome requirement.
- Process emissions of nitrous oxide from wastewater treatment facilities (less than 0.1% of reported emissions, all from one facility).
- Fugitive methane emissions from coal storage (less than 0.02% of reported emissions, all from one facility, which has ceased operation).

MassDEP expects that there are other very small emissions sources not listed above (various flares, small portable equipment, etc.) that would no longer be reported. MassDEP does not expect the elimination of these sources from the reporting program to have an impact on efforts to measure or control emissions.

To ensure consistency with federal GHG reporting requirements, MassDEP also is proposing to revise the definition of "greenhouse gas" to include all greenhouse gases reported pursuant to 40 CFR Part 98.

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<sup>6</sup> M.G.L. c. 21N, §2(b).

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

MassDEP is proposing to replace the requirement to quantify emissions in accordance with the GRP with a requirement to utilize methods specified in 40 CFR Part 98. For most sources this change should not be burdensome. For example, approximately one third of facilities that currently report under 310 CMR 7.71 already report to EPA pursuant to 40 CFR Part 98. Improved consistency among reporting requirements would clearly benefit these facilities by streamlining procedures for reporting to both programs. Reporting emissions from small combustion sources would not be burdensome, because EPA generally allows the use of billing records and default emission factors for these sources. As noted above, reporting of non-combustion biogenic carbon dioxide emissions, leakage of refrigerants, and emissions from some other small sources would not be required, further decreasing the overall burden to facilities.

MassDEP has identified a small number of sources and categories required by the GHG reporting program for which not enough information is currently available to conclusively determine that a switch to EPA methods would not be burdensome; therefore, while the proposed regulatory language requires the use of EPA methodologies in these cases, MassDEP is requesting comment on issues associated with reporting of these emissions. These required sources and categories include:

- **Electronics Manufacturers:** Approximately ten facilities report emissions of fluorinated gases from electronics manufacturing to MassDEP. While 40 CFR Part 98 includes a method that could be used to quantify these emissions (Subpart I), only three of these facilities are required to report to EPA pursuant to 40 CFR Part 98.
- **Petroleum and Natural Gas Systems:** Seven natural gas facilities are required to report to MassDEP but not EPA, including 2 – 3 owned by municipalities. Under the proposed revisions, emissions from these sources would be reported in accordance with 40 CFR 98 Subpart W.
- **Lime Manufacturing:** One facility not required to report to EPA would be required to quantify emissions in accordance with methods provided in 40 CFR Part 98, Subpart S.
- **Municipal Solid Waste Landfills:** Of the landfills that have reported emissions to MassDEP, there are two, one of which is owned by a municipality, that have not reported emissions to EPA pursuant to 40 CFR Part 98, Subpart HH.

As indicated above, MassDEP has thoroughly reviewed 40 CFR Part 98 and data reported to the MA GHG Registry to develop an understanding of the degree to which the proposed amendments may be burdensome. The discussion above supports the general conclusion that the amendments will not be burdensome. The specific methods listed above are currently used by at least one facility in each category in Massachusetts that reports to EPA, so one effect of the amendments would be to ensure that all facilities in each category are subject to the same requirements. MassDEP also notes that the GWSA requires MassDEP to “make reasonable efforts to promote consistency between programs” and require reporting by all facilities that emit more than 5,000 short tons CO<sub>2</sub>e of GHGs, even if some additional burden results. *See* M.G.L. c. 21N, § 2(b). However, MassDEP specifically seeks comment on the reporting requirements

for each of the categories of facilities listed above and the applicability of the EPA methods to those facilities.

MassDEP is proposing to eliminate the requirement to report emissions from motor vehicles that are assigned to a facility. This requirement was originally included in the regulation to address a GWSA requirement that facilities that exceed the 5,000 ton applicability threshold should report emissions from motor vehicles assigned to each facility.<sup>7</sup> MassDEP is proposing this change because:

- Motor vehicle emissions constitute less than 1% of emissions reported to the MA GHG Registry;
- MassDEP does not use the reported emissions in its GHG inventory;
- Facilities have identified the requirement to report these emissions as particularly burdensome, due to recordkeeping needs associated with vehicle fleets and fuel consumption;
- 40 CFR Part 98 does not include methods for quantifying motor vehicle emissions; and
- Accommodating motor vehicle emissions in the eDEP electronic reporting system would be difficult.

MassDEP believes that excluding the requirement for facilities to report motor vehicle emissions will not affect the purposes of the GHG reporting program, which is to “permit the secretary to measure compliance with greenhouse gas emissions reduction efforts. See G. L. c. 21N, § 2 (a)-(c); St. 2008, c. 298, § 10.” Kain v. Department of Environmental Protection, 474 Mass. 278, 283 (2016). In reaching this conclusion, MassDEP considered the minimal quantity of motor vehicle emissions as a percentage of total reported GHG emissions (less than 1%), along with the GWSA, Section 2, requirement for MassDEP to continually re-evaluate the reporting program to ensure consistency and streamlining in developing this proposal. The GWSA requirement, mentioned above, to “make reasonable efforts to promote consistency between programs” (M.G.L. c. 21N, § 2(b)) is also a consideration, because EPA does not require stationary facilities to report GHG emissions from vehicles and does not provide methodologies for doing so.

MassDEP also is proposing to:

- Eliminate the specific requirement to report emissions from separate emission sources separately because provisions that address aggregation of emission sources are included in various subparts of 40 CFR Part 98;
- Eliminate the requirement to report material characteristics and throughputs because 40 CFR Part 98 includes corresponding requirements which would be referenced in the revised 310 CMR 7.71;
- Add an explicit requirement to report data (other than emissions totals) required by applicable subparts of 40 CFR Part 98 in a format specified by MassDEP; and

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<sup>7</sup> While the language in Chapter 21N was recently amended to remove the requirement for facility-specific vehicle reporting, MassDEP has retained the authority to require reporting of transportation sector emissions in the amended statutory provisions. See Chapter 8 of the Acts of 2021. At this time, while MassDEP may implement other amendments with respect to transportation sector reporting in the future, the agency is proposing to eliminate the facility vehicle reporting requirement due to the reasons stated in this document.

- Eliminate the provision that allows facilities to quantify up to 1000 tons CO<sub>2</sub>e emissions using simplified estimation methods, and the provision that allows the use of industry best practice methods to quantify emissions in cases where the GRP does not include an applicable quantification method.

The reason for these changes is that the provisions will not be necessary because the revised regulation will only require reporting of GHG emissions for which there is an applicable method included in 40 CFR Part 98. MassDEP seeks comment on whether this proposal strikes the appropriate balance between ensuring consistency and streamlining requirements on the one hand and the need to account for sufficient sources of GHG emissions on the other to provide adequate guidance for the preparation of strategies to reduce emissions.

It should be noted that none of the proposed amendments will significantly affect MassDEP's GHG emissions inventory. The GHG reporting program only captures the limited subset of emissions that are reported by stationary facilities identified in the GWSA and is therefore not useful as a data source for compiling statewide emissions totals. MassDEP does capture all of the GHG emissions from stationary and mobile sources in its GHG inventory but uses other state and federal data sources that provide the necessary statewide totals.<sup>8</sup>

MassDEP also is proposing to change the reporting deadlines in 310 CMR 7.71 to be consistent with the reporting requirements of 310 CMR 7.12: *Source Registration*.<sup>9</sup>

### **C. Triennial Verification of Facility Reports: 310 CMR 7.71(7)**

MassDEP is proposing to eliminate the third-party verification requirement currently included in 310 CMR 7.71. The current verification requirement is based on the verification program that was established to support TCR's voluntary GHG reporting program, and references TCR's General Verification Protocol. In developing this proposal, MassDEP considered the results of a review of the verification requirement completed in 2015, including public comments.<sup>10</sup> About one-third (69) of the facilities that report under the GHG reporting program responded to the survey. Although most of the respondents said that the third-party verifiers conducted good work, only one-quarter said that verification improved the quality of their data and less than 20% said it was worth the cost. As amended, the regulation will require facilities to verify the truth, accuracy, and completeness of their reports as part of the submission process.<sup>11</sup> The elimination of the third-party verification requirement is necessary because no corresponding third party verification program or document exists to support verification of data reported pursuant to 40 CFR Part 98. In addition, other MassDEP reporting programs do not require third party verification but rely on verification by responsible officials, and therefore eliminating the GHG reporting third party verification requirement will make GHG reporting consistent with other MassDEP reporting programs.

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<sup>8</sup> Information about the GHG emissions inventory, including data sources, is available at <https://www.mass.gov/lists/massdep-emissions-inventories>.

<sup>9</sup> See the draft regulation for the specific deadlines, which vary based on several factors.

<sup>10</sup> Available at <http://www.mass.gov/eea/docs/dep/air/climate/ghgvrev.pdf>.

<sup>11</sup> GWSA requires verification of GHG emission reports, but not third-party verification. See M.G.L. c. 21N, §2(a).



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

MassDEP is proposing to retain the option for facilities to voluntarily report emissions pursuant to 310 CMR 7.71,<sup>12</sup> but eliminate the option for facilities to include emissions that are not required in facility reports. The reasons for this change are that few facilities have taken advantage of this option, and that adapting MassDEP's electronic reporting system to support reporting of optional data elements would add to the administrative burden for MassDEP and is not expected to capture significant additional GHG emissions.

#### **E. Greenhouse Gas Reporting Requirements for Retail Sellers of Electricity: 310 CMR 7.71(9)**

MassDEP is proposing to delete 310 CMR 7.71(9) and related definitions and citations because the compliance deadlines in this section have passed and the reporting requirements for retail sellers of electricity have already been moved to 310 CMR 7.75.

#### **F. Clean Energy Standard Greenhouse Gas Emissions Reporting: 310 CMR 7.75(9)(c)5.**

Retail sellers are allowed to account for the ownership and/or use of clean power and particular generation sources. One mechanism to document such clean energy is to retire Massachusetts Department of Energy Resources (DOER) Renewable Portfolio Standard (RPS)-eligible Renewable Energy Certificates (RECs), a mechanism typically used by electric utilities and competitive suppliers. Recently, municipal electric departments and municipal light boards have expressed interest in also retiring RECs. Therefore, MassDEP is proposing to allow municipal electric departments and municipal light boards to report the use of MA DOER RPS-eligible RECs, allowing such municipal retail sellers to use the same REC option available to electric utilities and competitive suppliers.

The submittal deadline for the optional MED and MLB Greenhouse Gas Emissions Report in 310 CMR 7.75(9)(c)2.d. is proposed to change from July 1<sup>st</sup> to November 15<sup>th</sup> of the year after the calendar year in which the MWh were generated. Some of the required Report data come from the annual returns MEDs and MLBs submit to the Massachusetts Department of Public Utilities (DPU). DPU has extended the submittal deadline for the annual returns to September 30<sup>th</sup>.

#### **G. Clean Energy Standard Reporting Requirements for Distribution Companies and Competitive Suppliers of Electricity: 310 CMR 7.75(9)(d)**

MassDEP is proposing to amend 310 CMR 7.75(9)(d) to clarify the authority of MassDEP to simplify reporting by requiring that certain submittals required under 310 CMR 7.75 be submitted directly to the Massachusetts Department of Energy Resources.

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<sup>12</sup> GWSA requires that MassDEP provide for the voluntary reporting of GHG emissions. *See* M.G.L. c. 21N, §2(a)(4).

## **IV. IMPACTS OF PROPOSED AMENDMENTS**

### **A. Economic Impacts**

The proposed amendments are not expected to have significant economic impacts. The program is a reporting-only program that does not include any requirement to reduce emissions, and MassDEP intends to work with facilities to ensure that proposed changes to the way facilities measure and report emissions are not burdensome. The proposed amendments will not result in any additional facilities being subject to the program and will eliminate some requirements that facilities have identified as particularly burdensome (such as the requirement to report emissions from motor vehicles assigned to the facility and the third-party verification requirement).

### **B. Impact on Massachusetts Municipalities**

The proposed amendments will not negatively affect cities or towns. The discussion of economic impacts above would apply to cities and towns that own facilities subject to 310 CMR 7.71 or are part of a MED or MLB subject to 310 CMR 7.75.

### **C. Massachusetts Environmental Policy Act (MEPA)**

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. Pursuant to 301 CMR 11.03(12) (MEPA Regulations), promulgation of these regulatory amendments, therefore, does not require the filing of an Environmental Notification Form under MEPA.

## **V. PUBLIC HEARING AND COMMENT**

MassDEP will hold a public hearing on the proposed amendments in accordance with M.G.L c. 30A. MassDEP will accept written comments for 10 days after the public hearing. The public hearing notice and proposed amendments are available on MassDEP's website at:

<https://www.mass.gov/service-details/massdep-public-hearings-comment-opportunities>.

MassDEP requests that written comments be submitted electronically via e-mail to:

[climate.strategies@mass.gov](mailto:climate.strategies@mass.gov). Written comments may also be mailed to: Climate Strategies, Department of Environmental Protection, Bureau of Air and Waste, One Winter Street, Boston, MA 02108. Questions about this document may be addressed to Joshua Cook at 617-292-5619, [joshua.cook@mass.gov](mailto:joshua.cook@mass.gov).