# Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

## Department of Environmental Protection

Charles D. Baker Governor

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## **Response to Comment on Proposed 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)

### October 2022

## **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)

## **Background and Purpose**

The Massachusetts Global Warming Solutions Act (GWSA) requires MassDEP to adopt regulations that require reporting of GHG emissions by large stationary facilities and retail electricity sellers. On December 29, 2008, MassDEP adopted 310 CMR 7.71 to comply with the large stationary facility reporting requirements the GWSA. 310 CMR 7.71 was previously amended in 2009, 2012, and 2017. The 2017 amendments also moved the reporting requirements for retail electricity sellers to 310 CMR 7.75. Most recently, amendments to the GHG emissions reporting requirements were proposed in July, 2021 and are now being finalized.

Additional information about the proposed amendments, including a Technical Support Document (TSD) published with the proposal that includes additional background about the regulatory history of 310 CMR 7.71, can be found at <a href="https://www.mass.gov/regulations/310-CMR-700-air-pollution-control#proposed-amendments-public-comment">https://www.mass.gov/regulations/310-CMR-700-air-pollution-control#proposed-amendments-public-comment</a>. After considering the comments received, MassDEP is finalizing the amendments with no substantive changes, for the reasons explained in this response to public comment. This document summarizes and responds to comments that were received during the public comment period.

### **Public Comment Process**

MassDEP held two public hearings and solicited oral and written comments on the proposed amendments to 310 CMR 7.71 and 7.75 in accordance with M.G.L. Chapter 30A. On July 9, 2021, MassDEP published in two newspapers, the Boston Globe and the Springfield Republican, notice of the public hearing and public comment period on the proposed amendments. The public hearing notice was also published in the Massachusetts Register on July 9, 2021, and interested parties were notified via electronic mail. The public hearings were held virtually on August 3, 2021, at 10:00 AM and 5:00 PM, and the public comment period closed on August 16, 2021. A list of commenters is included at the end of this Response to Comments document. A TSD was published on the website referenced above to provide commenters with detailed information about the rationale for the proposed amendments and other relevant background information.

## **Comments and Responses**

#### General Comments on Facility Reporting

Comment: All commenters addressed the role that the EPA GHG reporting program plays in supporting the requirements of 310 CMR 7.71. One commenter requested clarifications in relation to specific emission sources. (DSG) Another commenter stated that "A move to the EPA's reporting program, which has not been updated since the Obama Administration, is a significant step backwards." This commenter also asserted that "there are no credible data showing that the EPA's reporting program is a better emissions tracking system than the Commonwealth's" and characterized EPA's GHG reporting program as inadequate because it is "for general information purposes." (CLF) Comments related to specific source categories are addressed below, under Comments on Specific Source Categories.

**Response:** In general, MassDEP considers the move toward consistency with EPA's GHG reporting requirements to be an important step forward in a process that began with the 2012 regulatory amendments mentioned above. As explained in the TSD, consistency with EPA's GHG reporting program is the best way to address the M.G.L. c. 21N, § 2(b)(2) 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." Furthermore, EPA's GHG reporting program is an internationally recognized federal reporting program that forms the basis of Washington and California's GHG reporting programs. In contrast, the Climate Registry's (TCR's) General Reporting Protocol (GRP), which has been used by MassDEP in the past, is intended primarily to support voluntary reporting for general purposes and has not, to MassDEP's knowledge, been adopted by any other state, federal, or international GHG reporting program. MassDEP also notes that no commenter provided specific information that would support consistency with any other program or address any other legal obligations under M.G.L. c. 21N. Additional information about this topic is provided under Comments on Specific Source Categories, and in the TSD that was published when the amendments were proposed.

**Comment:** Third-party verification requirements should remain a requirement of 310 CMR 7.71, and the fact that there is no corresponding third-party verification requirement in 40 CFR Part 98 is not a sufficient reason for removing the third-party verification requirement. Commenters who advocated for third party verification also claimed that it "may help alleviate concerns around accuracy" about the EPA reporting requirements. (CLF, JCLF)

**Response:** As laid out in the TSD for the proposed amendments, the current verification requirement was based on the verification requirement in the GRP. 40 CFR Part 98 does not contain a third-party verification requirement and other MassDEP reporting programs do not require third-party verification. The decision to eliminate the third-party verification requirement was informed by a review of and public comment on the verification program that was completed in 2015 pursuant to 310 CMR 7.71(7)(h). The purpose of the review was to "evaluate information relevant to determining whether the verification requirement should be amended."

MassDEP's review of the verification requirement concluded:

Based on the information included in this report, MassDEP is considering amending the verification requirement to eliminate the third-party verification requirement, instead relying on the existing certification requirement . . . The primary reasons that MassDEP is considering this change are (1) the cost to facilities of third-party verification, (2) the expectation that it may not be possible to rely on TCR's reporting system and protocols in the future, and (3) the likelihood that future changes resulting from verification will be smaller than those discussed in this report.

https://openknowledge.worldbank.org/bitstream/handle/10986/23741/K8658.pdf?sequence=5&isAllowed=y.

<sup>&</sup>lt;sup>1</sup> See for example *Greenhouse Gas Data Management Building Systems for Corporate/ Facility-Level Reporting*, p. 49, published by the World Bank and available at

Eliminating the third-party verification requirement will make the GHG reporting program more consistent with other MassDEP reporting programs and 40 CFR Part 98, and is consistent with information compiled during the verification review process.

Also, MassDEP does not expect that third party verification would alleviate the commenters' stated concerns about the accuracy of the federal GHG reporting requirements because verifiers would only consider whether the federal requirements were being followed, not whether the underlying requirements result in accurate measurements.

**Comment:** GHG emissions reports should be publicly available on the Department's website. (CLF, JCLF)

**Response:** MassDEP published a summary report of data from 2009 until 2015, when the contract with TCR to maintain the MA GHG Registry expired and reporting transitioned to using the same electronic system (eDEP) that is used to report other air emissions pursuant to 310 CMR 7.12: Source Registration. MassDEP intends to develop and publish summary reports consistent with the reports posted from 2009 through 2015, likely beginning with the publication of a 2020 summary sometime in 2022.

**Comment:** The Department should mandate reporting of non-required emissions that are currently optional under 310 CMR 7.71. (CLF, JCLF)

**Response:** M.G.L. c. 21N, § 2(a)(4) requires that facilities not subject to Title V of the federal Clean Air Act or facilities that emit less than 5,000 MTCO<sub>2</sub>e annually be allowed to voluntarily submit reports under 310 CMR 7.71. The amendments to 310 CMR 7.71 would still allow facilities that emit less than 5,000 MTCO<sub>2</sub>e annually to submit a report, provided that the eDEP submission system (to which facilities report GHG emissions) is able to accommodate the emission types and sources the voluntarily reporting facility is submitting.

**Comment:** The statewide GHG emissions inventory would become less accurate if certain emissions were no longer captured by the 310 CMR 7.71 GHG reporting program. (CLF, JCLF)

**Response:** Data sources other than GHG reports from 310 CMR 7.71 are used in order to estimate the comprehensive statewide GHG inventory. MassDEP has analyzed the proposed changes to 310 CMR 7.71 and has determined that none of the changes will affect the statewide GHG inventory. For example, total emissions from vehicles in Massachusetts are estimated in the statewide GHG inventory based on aggregated data compiled and published by the federal government, so removing the separate requirement for particular facilities to report a small subset of the same emissions will not affect the inventory.

**Comment:** One commenter would like the word "applicable" inserted into the definition of Greenhouse Gas when referring to stationary emissions sources so that the definition would read:

Greenhouse Gas means any chemical or physical substance that is emitted into the air and that the Department may reasonably anticipate will cause or contribute to climate change including, but not limited to, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons,

perfluorocarbons, sulfur hexafluoride, and any other gas for which 40 CFR Part 98 includes a method for calculating greenhouse gas emissions from any **applicable** stationary emissions source. (DSG)

**Response:** MassDEP will not be finalizing any changes in response to this comment as the commenter did not provide any rationale as to why the definition should be changed. Furthermore, the suggested change would not be consistent with MassDEP's intent in referencing 40 CFR Part 98. As explained in the amended regulatory definition of "stationary emission source," reporting is required if EPA provides a method for calculating GHG emissions that can be used quantify emissions from the source. In theory, the suggested revision could result in a case where such emissions were not reported under 310 CMR 7.71 because EPA only required reporting of the gas from a source that was not considered "applicable" under 310 CMR 7.71.

**Comment:** One commenter was concerned about missing numbered sections that were removed from the draft amendments to 310 CMR 7.71, and how those changes would be resolved. (DSG)

**Response:** Removed sections will be addressed by renumbering the sections in the final regulations.

### Comments on Specific Source Categories, Including Retail Electricity Sellers

**Comment:** Two commenters expressed concern that a shift from the GRP to 40 CFR Part 98 would have an effect on reported emissions, with specific concern that "many emissions would no longer be counted under the proposed system: non-combustion biogenic carbon dioxide (mostly from landfills); fugitive emissions of refrigerants; emissions of nitrous oxide emissions from wastewater treatment plants; fugitive methane emissions from coal storage; and emissions from "very small" sources such as flares and portable equipment." (CLF, JCLF)

**Response:** M.G.L c. 21N, § 2(b)(2) requires MassDEP to "review existing and proposed state, federal and international greenhouse gas emissions reporting programs and to make reasonable efforts to promote consistency among the programs established" under M.G.L c. 21N and "to streamline reporting requirements on greenhouse gas emissions sources." Adopting 40 CFR Part 98 for GHG emissions will streamline reporting requirements for GHG emissions sources. While some emissions may no longer be captured by 310 CMR 7.71 reporting, the intent of 310 CMR 7.71 is not to capture all GHG emissions in the Commonwealth; that is the purpose of the GHG inventory. The shift to 40 CFR Part 98 for quantifying GHG emissions from stationary sources GHG reporting under 310 CMR 7.71 will still allow MassDEP to monitor GHG emissions from facilities, as required by M.G.L c. 21N, § 2(a)(1)-(4). As explained in the TSD and below, MassDEP carefully analyzed the specific source categories referenced in this comment in reaching this conclusion.

**Comment:** Utilizing 40 CFR Part 98 will not account for fugitive emissions of refrigerants, resulting in "missing emissions." (CLF)

**Response:** 310 CMR 7.71 is focused on capturing emissions from large stationary sources and is not intended to capture all sources of emissions within the Commonwealth. Fugitive emissions of refrigerants account for less than 0.3% of reporting emissions under 310 CMR 7.71 and this data is not necessary for MassDEP to monitor GHG emissions from facilities. In considering this comment, MassDEP also reviewed the new federal<sup>2</sup> and state<sup>3</sup> regulations on refrigerant emissions that were finalized recently. These comprehensive regulations address a much broader range of emissions sources than 310 CMR 7.71, thereby reducing the relevance of emissions data received from the small subset of Massachusetts refrigeration equipment located at large facilities regulated under 310 CMR 7.71. Also, regarding the concept of "missing emissions" MassDEP notes that, prior to amendment, 310 CMR 7.71 only required reporting of emissions from the small subset of refrigeration systems that happen to be located at large stationary facilities subject to 310 CMR 7.71, and that this data was not used in the statewide GHG emissions inventory because the inventory uses other data sources to track these emissions. Finally, in response to this comment, MassDEP will consider during the implementation process whether 40 CFR Part 98 may include a method that can be used to quantify any subset of these emissions, such as the mass balance method provided for determining sulfur hexafluoride emissions.

**Comment:** Utilizing 40 CFR Part 98 will not account for non-combustion biogenic emissions of carbon dioxide, particularly from landfills, resulting in "missing emissions." (CLF)

**Response:** 310 CMR 7.71 is focused on capturing emissions from stationary sources and is not intended to capture all sources of emissions within the Commonwealth. Emissions from non-combustion biogenic sources constitute less than 1.0% of reported emissions under 310 CMR 7.71 GHG reporting and discontinuing the collection of this data will not prevent MassDEP from monitoring GHG emissions from facilities. Furthermore, as discussed above, this change will make 310 CMR 7.71 more consistent with 40 CFR Part 98.

**Comment:** Utilizing 40 CFR Part 98 will not account for emissions from wastewater treatment plants, resulting in "missing emissions." (CLF)

**Response:** 310 CMR 7.71 is focused on capturing emissions from stationary sources and is not intended to capture all sources of emissions within the Commonwealth. Emissions from wastewater treatment plants account for less than 0.1% of emissions reported under 310 CMR 7.71, all reported from the same facility. Discontinuing the collection of this data will not prevent MassDEP from monitoring GHG emissions from these facilities.

**Comment:** Utilizing 40 CFR Part 98 will not account emissions from coal storage, resulting in "missing emissions." (CLF)

**Response:** 310 CMR 7.71 is focused on capturing emissions from stationary sources and is not intended to capture all sources of emissions within the Commonwealth. Emissions from coal

<sup>&</sup>lt;sup>2</sup> EPA Significant New Alternatives Policy (SNAP) https://www.epa.gov/snap/snap-regulations

<sup>&</sup>lt;sup>3</sup> 310 CMR 7.76 *Prohibitions on the Use of Certain Hydrofluorocarbons* <a href="https://www.mass.gov/service-details/prohibitions-on-the-use-of-certain-hydrofluorocarbons-310-cmr-776fa">https://www.mass.gov/service-details/prohibitions-on-the-use-of-certain-hydrofluorocarbons-310-cmr-776fa</a>

storage accounted for less than 0.2% of emissions under 310 CMR 7.71, and those emissions were from a single facility that has since ceased operation.

**Comment:** Utilizing 40 CFR Part 98 will undercount emissions from landfills and gas pipeline systems. (CLF, JCLF)

**Response**: MassDEP acknowledges that there is uncertainty regarding the emissions from landfills and gas pipelines. Given this uncertainty, MassDEP has determined that continuing to rely on 40 CFR Part 98 is the most prudent way to comply with the GWSA requirement to promote consistency among programs. MassDEP also notes that the commenter did not express support for any particular alternative methodology for calculating emissions from particular landfills and gas pipelines. MassDEP is staying abreast of EPA and other research that may support future updates to 40 CFR Part 98.

**Comment:** The discontinuation of reporting of emissions related to assigned motor vehicles would significantly impact the accuracy of the MA GHG Registry, particularly given that the transportation sector is the largest contributor to GHG emissions in the Commonwealth. (CLF, JCLF)

Response: Prior to the current amendment, 310 CMR 7.71 only required reporting of emissions from vehicles assigned to a stationary facility required to report emissions pursuant to 310 CMR 7.71; these facilities represent only a small subset of vehicles in Massachusetts. These motor vehicle emissions contribute to less than 1% of emissions captured by reporting under 310 CMR 7.71, and the assigned motor vehicle emissions reported under 310 CMR 7.71 are not used in the statewide GHG inventory as the GHG inventory uses federal data on fuel usage and does not use the assigned motor vehicle emissions data from 310 CMR 7.71 reporting. 40 CFR Part 98 does not include methods for quantifying motor vehicle emissions, accommodating motor vehicle emissions in the eDEP electronic system would be difficult, and M.G.L c. 21N, § 2(b) requires that "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" be made. The decision to no longer require reporting of the emissions is also consistent with recent GWSA amendments that resulted in the deletion of the statutory requirement to require reporting of "company owned or company-leased motor vehicles," by amending the definition of "direct emissions."

**Comment:** One commenter posed a number of technical questions related to the requirement to report emissions "if EPA provides a method for calculating greenhouse gas emissions that can be used to quantify emissions from the source." (DSG)

**Response:** MassDEP is providing preliminary informational responses to these questions below, but also acknowledges the potential need to provide additional detailed instructions during the implementation process.

• If a facility is required to report under 310 CMR 7.71(3)(a) and has an emissions source for which there is a method of calculating the GHG emissions associated with

- that source, the facility is required to report those emissions, whether any applicability threshold set in 40 CFR 98 has been met.
- If a facility is required to report emissions under 310 CMR 7.71(3)(a) and that facility has GIS (gas insulated switchgear), that facility would need to report sulfur hexafluoride (SF<sub>6</sub>) emissions by calculating said emissions with the methodology for calculating SF<sub>6</sub> emissions from GIS found at 40 CFR 98.303.
- If a research and development facility is required to report under 310 CMR 7.71(3)(a) that facility would need to report emissions in accordance with 310 CMR 7.71 for any GHGs which 40 CFR 98 has a method for quantifying GHG emissions.
- If a facility is required to report emissions under 310 CMR 7.71(3)(a) and that facility combusts fuel in stationary equipment, that facility would need to report emissions if that fuel type is found in Table C-1 in Subpart C of Part 98. For example, acetylene used for welding would not be required to be reported, but gasoline or diesel used in stationary equipment would have to be reported using the emissions factors set forth in Table C-1 in Subpart C of Part 98 using an applicable calculation methodology found in 40 CFR 98.33.
- If a facility is required to report under 310 CMR 7.71 and has equipment that uses natural gas, the natural gas usage from said equipment would be captured using an applicable equation found at 40 CFR 98.33(a).
- Emissions from gas cylinders used in laboratories would not have to be reported as there is no method for calculating that type of emission in 40 CFR 98.
- CO<sub>2</sub> used in soda fountains, fire suppression equipment, as a calibration gas for continuous emission monitoring systems or to purge generators, and emissions from the decomposition of urea used in selective catalytic reduction systems do not have a method for calculating emissions in 40 CFR 98 and therefore do not need to be reported under 310 CMR 7.71.
- Emissions from purging natural gas pipelines, or blowdown vent stack events, must be calculated if that facility meets the applicability requirements at 310 CMR 7.71(a)(3).
- Emissions associated with emergency generators must be reported if the facility meets the applicability criteria at 310 CMR 7.71(3)(a).

**Comment:** Municipal light boards should not be able to double-count emissions attributes under the changes to 310 CMR 7.75. (CLF, JCLF)

**Response:** The changes to 310 CMR 7.75 will not allow municipal light boards to double-count emissions attributes.

#### **List of Commenters**

**Conservation Law Foundation (CLF)** 

Joint Comment submitted by the Conservation Law Foundation (JCLF)

Acadia Center

Berkshire Environmental Action Team

Climate Action Now, Western Mass
Concerned Citizens of Franklin County
Conservation Law Foundation
Elders Climate Action Mass Chapter
FCCPR Climate Change Task Force
Greater Andover Indivisible
Greater Andover Indivisible
Hands Across the River Coalition Inc
HealthLink
HEET

Longmeadow Pipeline Awareness Group Massachusetts Climate Action Network No Fracked Gas in Mass

Out Now

Pauline Penny Himlan

Pipe Line Awareness Network for the Northeast

Progressive Democrats of Massachusetts

Reverend Patrice Ficken

Salem Alliance for the Environment

Save Massachusetts Forests

Sierra Club Massachusetts

Springfield Climate Justice Coalition

Unitarian Universalist Mass Action

#### **DSG Solutions (DSG)**