

**Massachusetts
Greenhouse Gas
Reporting Regulation
310 CMR 7.71**



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The Global Warming Solutions Act (GWSA)



- Signed by Governor Patrick on August 7, 2008.
- Significant Provisions:
 - ✓ Require Mandatory Reporting of Greenhouse Gas (GHG) Emissions
 - ✓ Develop 1990 Baseline and 2020 BAU Projection
- Develop Targets and Plans to Achieve Statewide Reductions
 - 10%-25% below 1990 levels by 2020
 - 80% below 1990 levels by 2050

Full text of the GWSA can be found at:

<http://www.mass.gov/legis/laws/seslaw08/sl080298.htm>

Reporting Program Timeline



- December 2008: GHG regulation promulgated
- April 2009: Registration
- July 2009: Amended GHG regulation
- April 15, 2010: Facilities Report 2009 CO₂ emissions
- April 15, 2011 and future years: Facilities report emissions of 6 GHGs
- December 30, 2011 and future years: Triennial verification

Regulations are available at:

<http://www.mass.gov/dep/air/laws/regulati.htm#771>

US EPA GHG Reporting Program



- Generally, threshold for reporting to US EPA is 25,000 metric tons CO₂e per year
- ~ 50 of largest emitters in MA will report to MassDEP and US EPA beginning with 2010 emissions
- US EPA regulations for quantifying emissions may be more prescriptive than MA
- Encourage all reporters to use methodologies required by US EPA to report to MassDEP
- Biomass CO₂ emissions don't trigger reporting to US EPA (different from MassDEP)
- US EPA does not require third-party verification (different from MassDEP)

Tools and Resources



- Available on the MassDEP GHG Reporting webpage:
www.mass.gov/dep/air/climate/reporting.htm
- Slides from Today's Presentation
- Regulation
- General Reporting Protocol and General Verification Protocol
- Frequently Asked Questions (FAQ)
- Draft Applicability Screening Tool
- Informational Sheet on Becoming a MassDEP-Recognized Verification Body
- Coming Soon - Training Schedule

Applicability



- Facility Reporters:
 - Facilities subject to 310 CMR 7.00: *Appendix C* (The MA Air Operating Permit Program)
 - Facilities that emit > 5,000 short tons/year CO₂e (> 5,000 short tons/year CO₂ in 2009)
- Once in always in, unless a facility can show that it is unlikely to trigger applicability requirements in any future year
- Biomass CO₂ emissions count toward the 5,000-ton threshold.

Refer to 310 CMR 7.71(5)(a)



Applicability: 2009 Emissions

- Applicability for 2010 reporting (2009 Emission) is based on:
 - Facilities subject to 310 CMR 7.00: *Appendix C* (The MA Air Operating Permit Program) OR
 - 5,000 short ton CO₂ threshold
 - 2009 CO₂ emissions
 - Include emissions from stationary combustion of ANY fuel
 - Motor vehicle emissions are NOT included in determining applicability

Refer to 310 CMR 7.71(5)(a)

Applicability: 2010 Emissions and Beyond



- Applicability for 2010 emissions similar to 2009, except:
 - Based on all emissions from stationary sources - factory stacks, fugitive emissions, manufacturing processes, and vents
 - Includes emissions of ALL 6 GHGs (CO₂, CH₄, N₂O, SF₆, PFCs, HFCs)
 - 5,000 tons CO₂e (carbon dioxide equivalents, not actual tons for non-CO₂ gases)
- Note: Some gases have very high global warming potentials; less than one ton of actual emissions may be greater than 5,000 tons when expressed in CO₂e!

Refer to 310 CMR 7.71(5)(a)

GHG Reporting Requirements



- Annual Reporting Requirements for Facilities
 - When is the deadline to report?
 - Where do I report?
 - What do I report?
 - How do I quantify my GHG emissions?
 - What documentation is required?
- Triennial Verification

Note: Today will not cover reporting requirements for retail sellers of electricity.

When is the Deadline to Report?



- Facilities must annually report emissions by April 15th
- First GHG Report is due by April 15, 2010
- The Climate Registry Voluntary Reporters Only: Optional extension of reporting deadline to June 30th
 - Reporters that utilize extension must notify MassDEP by March 15th

Refer to 310 CMR 7.71(5)(a) and (j)



Where do I Report?

- MA GHG Registry
 - Online data system
 - Developed by The Climate Registry for MassDEP
- Training
 - Interactive Webinars
 - Begin in February 2010, schedule will be available on MassDEP website
 - www.mass.gov/dep/air/climate/reporting.htm
 - Must register in advance

Refer to 310 CMR 7.71(5)(e)



What do I Report?

- 2009 emissions - CO₂ only
- 2010 emissions - of all six GHGs
- All facilities report “direct stack emissions”
 - Includes emissions from stationary emission sources (factory stacks, manufacturing processes, vents, fugitive emissions, and other process emissions)
- Facilities that emit > 5,000 short tons CO₂e report motor vehicles and “direct stack emissions”

Refer to 310 CMR 7.71(5)

Reporting Motor Vehicle Emissions



- Report company owned or company leased motor vehicles that are assigned to a reporting facility
 - Assigned to a facility means “operate in support of that facility more often than they operate in support of any other facility”
- Not necessary to report motor vehicles assigned to a facility for < 6 consecutive months, regardless of leased, rented, or owned
- 2009 emissions – only motor vehicles intended for public roadways are required to be reported

Refer to 310 CMR 7.71(5)(b)

How do I Quantify My GHG Emissions?



- MA GHG regulation explains which GHG emissions to report
- The regulation requires facilities to utilize The Climate Registry's General Reporting Protocol (GRP) v.1.1
- GRP explains how to quantify emissions
- GRP is available at:
www.mass.gov/dep/air/climate/reporting.htm

Refer to 310 CMR 7.71(5)(c)

The GRP and MassDEP's Reporting Requirements



- MassDEP requires reporting “in accordance with all applicable requirements of the General Reporting Protocol.”
- Additionally, MassDEP requires, facilities to:
 - Quantify emissions to the “extent practicable” using a the most accurate methodology (“Tier A”).
 - Report stationary emissions sources separately
 - Report the quantity and characteristics of material throughputs needed to determine emission factors
- Facilities may estimate emissions up to 1,000 short tons CO₂e

Refer to 310 CMR 7.71(5)(c)

What Documentation is Required?



- Facilities may be required to retain documentation:
 - Rationale and justification for using a less accurate methodology (“Tier B” or “Tier C”)
 - Rationale and justification for not reporting stationary emissions sources separately
 - Methodology and data used to quantify emissions in accordance with industry best practices
 - Documentation provided to verification body
- Documentation must be retained on site for 5 years from date of submittal

Refer to 310 CMR 7.71(5)(c) and (6)

Triennial Verification of Facility Reports



- Required to hire a Third-Party Verifier to triennially review GHG reports
- MassDEP is utilizing The Climate Registry's General Verification Protocol (GVP) v. 1.0
 - Provides Third-Party Verifiers with instructions for how to verify GHG emissions
- The GVP is available at:
<http://www.mass.gov/dep/air/climate/reporting.htm>

Refer to 310 CMR 7.71(7)

Triennial Verification Schedule



Criteria	Reporting Deadline for First GHG Report	Reporting Deadline for First Verified GHG Report	Verification Deadline
Reported >25,000 short tons CO ₂ in 2009	April 15, 2010 (2009 emissions)	April 15, 2011 (2010 emissions)	December 31, 2011
Reported >10,000 short tons CO _{2e} in 2010 (but not required to verify 2010 emissions)	April 15, 2010 (2009 emissions)	April 15, 2012 (2011 emissions)	December 31, 2012
All other facilities	April 15, 2010 (2009 emissions)	April 15, 2013 (2012 emissions)	December 31, 2013

Refer to 310 CMR 7.71(7)

Voluntary Reporting by Facilities



- Voluntary reporting by facilities not otherwise subject to 310 CMR 7.71
- Facilities may include additional data elements, beyond those required, in any report (e.g. electricity consumption)
- Note that voluntary reports and voluntary data elements are subject to same reporting and verification requirements

Refer to 310 CMR 7.71(8)

Greenhouse Gas Reporting



For additional information about MassDEP's GHG Reporting Regulation:

www.mass.gov/dep/air/climate/reporting.htm

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