

The Tailoring Rule Basics

The [Tailoring Rule](#) primarily targets sources of combustion, but it may affect other sources that are modifying or applying for new [Permits to Install](#) (PTIs) and [Renewable Operating Permits](#) (ROPs). If you have emissions of any of the following pollutants, you may be affected by the Tailoring Rule:

- carbon dioxide (CO₂),
- hydrofluorocarbons (HFCs),
- methane (CH₄),
- nitrous oxide (N₂O),
- perfluorocarbons (PFCs), and
- sulfur hexafluoride (SF₆).

The Tailoring Rule may also affect sources that received permits but have not begun construction by July 1, 2011.

The Tailoring Rule may also affect sources that received permits but have not begun construction by July 1, 2011. Below are some additional links that provide more information about the Tailoring Rule.

- [EPA Fact Sheet](#): This fact sheet from the Environmental Protection Agency (USEPA) provides a summary of the rationale, legislative highlights and significant dates, and other pertinent information related to the Tailoring Rule.
- [Final Rule](#): This is the final Tailoring Rule as it appeared in the Federal Register, Vol. 75, No. 106, on Thursday, June 3, 2010.
- July Transition Issue: Beginning July 1, 2011, any source that received a permit to install for a minor source may become subject to Prevention of Significant Deterioration (PSD) under the Tailoring Rule if:
 - it has potential greenhouse gas (GHG) emissions that equal or exceed 100,000 tons per year (tpy) on a CO₂e basis, and
 - 100 / 250 tpy on a mass basis, and
 - it has not begun actual construction by July 1, 2011.
- [EPA Permitting Guidance](#): provides the basic information that permit writers and applicants need to address GHG emissions in permits. Available guidance includes white papers, training videos, Best Available Control Technology (BACT) examples, tools for estimating GHGs, biomass deferral, and currently proposed legislation.
- [Biomass Deferral](#): On January 12, 2011, EPA announced its plan to defer, for three years, greenhouse gas (GHG) permitting requirements for carbon dioxide (CO₂) emissions from biomass-fired and other biogenic sources. EPA has now also [proposed a rule](#), [developed a fact sheet](#), and [developed guidance](#) on how to address BACT for CO₂ emissions from bio-energy sources.

Glossary

Greenhouse Gases (GHGs) trap the Earth's heat that would otherwise escape from the atmosphere into space, and form the greenhouse effect that helps keep the Earth warm enough for life. For purposes of regulation, the Tailoring Rule defines GHGs as the sum of carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), than family of hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).

Global Warming Potential (GWP) is defined as the ratio of heat trapped by one unit of mass of a GHG to that of one mass of CO₂ over a specified time period (in this case, 100 years). The Tailoring Rule requires the use of GWPs found in [Table A-1 of 40 CFR Part 98](#) (the Mandatory Reporting Rule). Table A-1 can be found on page 56395 of Vol. 74, No. 209 of the Federal Register, October 30, 2009.

Carbon Dioxide Equivalent (CO₂e) is the internationally recognized measure for greenhouse gases. When quantities of the different GHGs are multiplied by their GWPs, the different GHGs can be summed and compared on a CO₂e basis. For example, CH₄ has a GWP of 21. This means that each ton of CH₄ emitted would have 21 times as much impact on global warming over a 100-year time horizon as one ton of CO₂ emissions. Therefore, one ton of CH₄ would equal 21 tons of CO₂e. By aggregating all GHGs on a CO₂e basis at the source level, a facility can evaluate its total GHG emissions contribution based on a single metric.

Mass Basis relating to GHGs means the mass of matter contained in an object. It is given in units of weight such as grams, kilograms, pounds, tons, etc. For purposes of calculating total GHG emissions on a mass basis, it means calculating the individual mass of each GHG pollutant (no GWPs applied) and summing the result.

Prevention of Significant Deterioration ([PSD](#)) is the federal program for major sources of air pollution. EPA has delegated the authority to issue the PSD permits to Michigan under our [Part 18 Rules](#). GHG PSD applicability tables and a "cheat sheet" are available.

Renewable Operating Permit ([ROP](#)) means a permit issued under the national permitting system as required by Title V of the Federal Clean Air Act of 1990 and administered by each state.