

Greenhouse Gas Regulations: How the EPA Is Regulating Manufacturers' Shop Floors



The Environmental Protection Agency (EPA) has moved forward with a series of greenhouse gas (GHG) regulations under the Clean Air Act. As a result, the EPA has drastically expanded its reach over manufacturers' fuel choices, processes and overall energy efficiency, giving it unprecedented control over how businesses operate.

There are few, if any, limits on the EPA's new authority. Any facility that emits GHGs must abide by these new regulations. The EPA's burdensome overreach will discourage business growth and stifle job creation.

What You Need to Know About the GHG Permitting Process

- > The EPA estimates that 6 million buildings will ultimately fall under a new permitting threshold that requires companies to install "best available control technology" (BACT).
- > These regulations will apply to the largest GHG emitters, including power plants, refineries and cement production facilities, as well as smaller emitters, such as churches, farms, restaurants, hotels and health care facilities.
- > The EPA usually does not even administer the process; state agencies are tasked with this responsibility.
- > Under these regulations, as the EPA has interpreted them, state agencies have the power to regulate how and where a manufacturing facility is built and how it operates and dictate what types of machinery, fuel sources and production methods can be used. This wide-reaching discretion and nearly unlimited level of control will negatively impact how thousands of manufacturers do business.
- > According to the EPA's own guidance, the permitting process "should default to the highest level of control for which the applicant could not adequately justify its elimination based on energy, environmental and economic impacts."
- > The EPA gives full discretion to state agencies to determine a permit approval process, allowing them to establish alternative approaches and more stringent policies. This means that the approval process is entirely subjective with no oversight for consistency from case to case or between different states.

How the Permitting Process Will Harm Manufacturers

The table below shows examples of the requirements manufacturers will be forced to meet to obtain a GHG permit. They are taken entirely from the EPA's own materials.

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| <p>Manufacturers That Use Commercial or Industrial Boilers</p> | <ul style="list-style-type: none"> • Change energy sources to costly alternatives. • Perform system integration, calibration and maintenance (\$1 million). • Install an economizer (\$2.3 million). • Install an air preheater (\$200,000–\$250,000). • Install a condensate return system (\$75,000). • Reduce slagging and fouling of heat transfer surfaces (\$50,000–\$125,000). • Perform network-based optimization (\$100,000). |
| <p>Cement Manufacturers (also applies to glass and other similar manufacturing processes)</p> | <ul style="list-style-type: none"> • Change energy sources to alternative fuels and sources, such as hybrid solar plants. • Substitute the raw materials used. • Blend cement with other materials. • Change the way the facility operates, including everything from motors to fans to compressed air systems to lighting. |
| <p>Iron and Steel Manufacturers</p> | <ul style="list-style-type: none"> • Change energy sources to costly alternatives. • Make changes to the coke-making, casting and hot rolling process, which will add on costs for potentially decades (with changes to the coke-making process costing as much as \$110 per metric tonne and payback times of more than 50 years). |
| <p>Pulp and Paper Manufacturers</p> | <ul style="list-style-type: none"> • Change energy sources to costly alternatives. • Replace boilers. • Install new technologies for chemical recovery furnaces and combustion units. • Install new combined heat and power (CHP) units or switch the type of CHP system used. • Install control measures to reduce GHG emissions from pulp and paper landfills. |
| <p>Oil Refiners</p> | <ul style="list-style-type: none"> • Change energy sources to costly alternatives. • Install carbon capture technologies. • Install or upgrade power or waste heat recovery systems. |

The EPA's New Authority Is Deterring Economic Growth

According to the EPA, before it chose to include GHGs in the permitting process, about 280 permits a year were issued to new construction projects. These permits were required for facilities that emitted more than 250 tons of regulated pollutants per year, such as particulate matter or lead. However, in the year and a half since it began requiring GHGs as part of the permit—an act that vastly expanded the number of buildings covered, since all industrial operations emit large quantities of carbon dioxide—there have been only 44 total permits issued. The EPA had expected more than 900. Manufacturers, afraid of the intrusiveness of the new process, are keeping their money in their pockets.

Economic experts believe the uncertainty created by the EPA's GHG regulations will cause investment to decline by 5–15 percent in directly impacted industries, such as electric power, mining, manufacturing and wholesale and retail trade, resulting in a \$25 billion–\$75 billion reduction in investment outlays, 476,000–1.4 million fewer jobs and \$47 billion–\$141 billion less in GDP.



A Simple Legislative Solution Will Fix This Problem

Section 165 of the Clean Air Act (42 U.S.C. § 7475) is amended as follows:

“(f) The requirements of this section shall not apply to greenhouse gases.”

Section 169 of the Clean Air Act (42 U.S.C. § 7479) is amended as follows:

“(5) The term “greenhouse gas” means any of the following:

“(1) Water vapor.

“(2) Carbon dioxide.

“(3) Methane.

“(4) Nitrous oxide.

“(5) Sulfur hexafluoride.

“(6) Hydrofluorocarbons.

“(7) Perfluorocarbons.

“(8) Any other substance subject to, or proposed to be subject to, regulation, action or consideration under this Act to address climate change.”

¹ Carrie Wheeler, “Information Collection Request for Prevention of Significant Deterioration and Nonattainment New Source Review,” U.S. Environmental Protection Agency, no date, pp. 16–20, available at <http://www.regulations.gov>, Docket ID EPA-HQ-OAR-2009-0517-19184.

² Final Rule, Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule Step 3 and GHG Plantwide Applicability Limits, 77 Federal Register 41,051, at 41,058 (July 12, 2012).

³ Testimony of Margo Thorning, Ph.D., before the Senate Committee on Environment and Public Works, Aug. 1, 2012, available at <http://www.accf.org>.