Oregon Department of Environmental Quality

Rulemaking Brief: Regulated Entities and Covered Emissions

Climate Protection Program 2024 Rulemaking

Introduction

The Climate Protection Program regulated significant sources of greenhouse gas emissions throughout Oregon, including in transportation, residential, commercial, and industrial settings. This included emissions from industrial manufacturing activities, emissions from fossil fuels used in furnaces to heat homes and offices, and in engines to run cars, trucks, and other equipment powered by gasoline and diesel. The point at which these sources are regulated can vary by sector and these decisions can impact total emissions covered by the program and which entities or companies are directly regulated.

The CPP used two approaches to limit and reduce emissions.

- Declining and enforceable caps on emissions from the use of fossil fuels.
- Best available emissions reductions approach for a limited amount of site-specific emissions at certain industrial facilities.

Regulated entities and covered emissions

Regulated entities subject to the declining emission caps are shown in Table 1. As of March 2023, these covered fuel suppliers included all three natural gas utilities and twenty liquid fuels and propane suppliers. Liquid fuels and propane suppliers included suppliers of gasoline, diesel, kerosene, and propane with emissions that met or exceeded a threshold for inclusion. This threshold declined over time to cover a wider scope of emissions and suppliers and would have captured approximately 99% of covered emissions from liquid fuels and propane used in Oregon.

Table 1: Covered Fuel Suppliers in CPP

Covered fuel supplier type	Covered emissions	Applicability thresholds
Natural gas utilities (3)	Anthropogenic greenhouse gas emissions from natural gas supplied Excludes: • Natural gas used at electricity generating facilities • Biomass-derived fuels	No threshold
Liquid fuels and propane suppliers (20)	Anthropogenic greenhouse gas emissions from fossil fuels supplied Emissions from related entities aggregated Excludes: • Aviation fuels • Biomass-derived fuels	Declining threshold (MT CO2e) For 2022-2024: 200,000 For 2025-2028: 100,000 Declined to 25,000 by 2031

The CPP also included “Best Available Emissions Reduction” rules to regulate certain air-permitted facilities. BAER only applied to emissions from industrial manufacturing processes, the use of solid fuels and/or emissions from natural gas supplied directly by an interstate pipeline, if emissions met or exceeded a 25,000 MT CO2e (metric ton of carbon dioxide equivalency) threshold. BAER covered emissions were not included under the emissions cap.

Table 2: Covered Stationary Sources (BAER sources) in CPP

Stationary sources (BAER sources)	Covered emissions	Thresholds	Modifications

• Unique emissions
• Permitted industrial sources
• New permitted facilities
• Subset of facilities making modifications
	• Emissions from industrial processes
	• Emission from fossil fuel combustion not regulated by cap
	  • Interstate natural gas pipeline emissions
	  • Solid fuels combustion
	• Excludes biomass derived fuels
		• Existing facilities
		  • 25,000 MT CO2e
		• New facilities
		  • Potential to emit 25,000 MT CO2e
		• Facilities pursuing modifications
		  • Four factors
			• Not an existing BAER source
			• Modifications represent significant changes to processes
			• Potential to emit increase 10,000 MT CO2e
			• Potential to 25,000 MT CO2e

Considerations for natural gas emissions

Natural gas is used for a variety of purposes including for cooking, heating, and other activities in commercial and residential buildings. It is also used on-site at manufacturers and other industrial facilities. Natural gas used in Oregon is mainly delivered via local distribution systems operated by natural gas utilities. Natural gas suppliers sell or deliver natural gas for use in Oregon. These utilities supply gas to 2 different types of customers:

- Residential, commercial, and other gas consumers relying on the utility to acquire the gas commodity on their behalf, and
- “Transport” customers for whom the utility is simply transporting gas that the Transport customer procured directly or through third parties called “Marketers”.

A third type of gas user are those that receive their gas through direct connections to an interstate pipeline rather than from the local distribution systems operated by gas utilities.

In developing the CPP, DEQ decided to regulate natural gas utilities as the single point of regulation for all gas they deliver both to their retail customers and to their Transport customers. Regulating natural gas at a relatively small number of entities provided a simpler means for DEQ to implement the program.

DEQ also considered different approaches for reducing emissions from natural gas used at large stationary sources. Options considered included directly regulating large stationary sources for their natural gas emissions or regulating Marketers for gas they contractually purchase on behalf of the utilities’ Transport customers. Either of those approaches would have meant a greater number of entities directly regulated by the CPP emissions cap, but the scope of emissions covered by the cap would have remained the same. Ultimately, DEQ proposed to directly regulate large stationary sources only for emissions from natural gas supplied directly by interstate pipelines and the other aforementioned emissions covered in the BAER approach.

Considerations for emissions at large stationary sources

Stationary sources refer to businesses in Oregon that emit greenhouse gases from on-site activities, such as a manufacturing facility. Emissions can be divided into two key categories:

1. Emissions from use of fuels, such as natural gas, petroleum, or another fossil fuel, for example to generate heat, steam, or power operations.
2. Emissions from industrial processes, such as etching semiconductors or producing cement.

Most stationary sources using fuel on-site use natural gas, but some use other fossil fuels like diesel. During the development of the CPP, DEQ analyzed scenarios that placed the point of regulation upstream at the natural gas utility and downstream at large stationary sources using natural gas.

DEQ also considered the possibility that a stationary source would have greater control over their own gas use than a natural gas supplier might. DEQ also noted that large stationary sources of emissions are sometimes also sources of health-hazardous criteria air pollutants and may be located in or near communities. Requiring on-site reductions of greenhouse gas emissions can also result in reductions of these co-pollutants. DEQ also discussed that regulating these industrial sources of emissions may also impact operational costs and ability to produce goods. This could have an economic impact on consumers and could lead to leakage by driving businesses and emissions to relocate out of state.

DEQ noted that the smaller scope of industrial process emissions at stationary sources were both industry and site specific. Therefore, options for reducing emissions could vary greatly from facility to facility.

With the BAER approach, DEQ could regulate a relatively small number of large stationary sources with covered emissions at or greater than 25,000 MT CO2e. DEQ would have the flexibility to consider several factors, including on-site equipment, operational practices, goods manufactured, and surrounding communities in identifying any potential strategies for reducing emissions. The point of regulation for most of the emissions associated with stationary sources, emissions from the use of fossil fuels, would be regulated by covered fuel suppliers and subject to mandatory declining limits.

The BAER approach was going to require extensive work both by DEQ and sources regulated by those rules to conduct extensive, site-specific evaluations to identify potential options for reducing emissions. While the amount of work to implement those rules was clearly significant, the amount of emission reductions that would have been achieved was uncertain and dependent on the results of those site-specific evaluations.

Another potential regulatory approach to the emissions that were covered by the BAER rules would be to cover those sources as directly regulated entities under the emissions cap portion of the program. While that would entail more parties regulated by the emissions cap, it would offer more certainty on the emissions reductions achieved by the overall program.

Considerations for liquid fuels and propane supplier thresholds

DEQ used a declining threshold to determine which liquid fuels and propone suppliers would be regulated by CPP and when. A lower threshold meant a greater percentage of emissions would be covered under the CPP and could also be a tool to limit potential in-state leakage from larger

fuel suppliers to smaller fuel suppliers. A higher threshold would help avoid regulating smaller businesses with less administrative capacity and would allow more time for them to prepare for the regulation.

Due to the annual variability in the fuels sector, a company's market share can change significantly from year to year. A fuel supplier could have emissions above the selected threshold one year, but not in future years. This could occur regardless of the threshold level selected but would occur more frequently at lower thresholds.

Reducing greenhouse gas emissions from fuels like diesel also lowers co-pollutants which negatively impact public health. These types of negative health impacts are disproportionately born by many environmental justice communities as many are located near busy roadways. While there was no way to target emissions reductions from fuels to specific communities or locations through the application of different threshold levels, DEQ did consider these impacts.

DEQ discussed potential starting thresholds of 5,000, 25,000, 100,000, 200,00 and 300,000 MT CO2e. Ultimately DEQ decided to start with a 200,000 MT CO2e threshold that covered almost 90% of emissions and would decline after each 3-year compliance period until arriving at a 25,000 MT CO2e threshold that covered an estimated 99% of emissions from those fuels.

Table 3: Applicability Thresholds for Liquid Fuels and Propane Suppliers

Threshold	Estimated Share of Fuel Sector Emissions
200,000 MT CO2e	89%
100,000 MT CO2e	94%
50,000 MT CO2e	97%
25,000 MT CO2e	99%

Discussion questions

- What should DEQ be considering in reestablishing a program in 2025 for regulated entities?
- Should DEQ reconsider the point of regulation for any emissions discussed above?
- Should DEQ include facility-specific regulations similar to the Best Available Emissions Reduction regime in the CPP? Or should those emissions be covered by the cap?
- Should DEQ reconsider the emissions threshold when establishing the 2025 cap? Why and what threshold?

More Information

Please visit the Climate 2024 Rulemaking website for more information on this rulemaking. Additional information is also available on the CPP 2021 Rulemaking and the Climate Protection Program website.

Non-discrimination statement

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