GOVERNMENT OF THE DISTRICT OF COLUMBIA

Department of Energy and Environment

Response to Comments on Proposed Rulemaking: "Greenhouse Gas (GHG) Intensity Limits for Fuels Used in Fuel-Burning Equipment"

On June 28, 2019, The Department of Energy and Environment (DOEE) published a notice of proposed rulemaking to amend the District's regulations on air quality (66 DCR 007688). DOEE received comments from one commenter (Trinity Consultants) on July 30, 2019. While this submittal was one day after the end of the public comment period, DOEE has elected to respond to the comments.

Below is the text of the comments received, followed by DOEE's responses.

Comment #1: Proposed CO2 Limit: The basis for the proposed limit 180 lbs CO2 per mmBTU of input is unclear. We suggest that DOEE provide the basis or rationale for this limitation and setting a single limit across all fuel types and emission units.

DOEE Response: This is a greenhouse gas (GHG) intensity regulation. The intent is to ensure that energy is obtained from fuel sources that provide a relatively high amount of energy for the amount of GHGs emitted. This is consistent with the goals of the Clean Energy DC Plan and the District's Sustainable DC Plan. The specific limit of 180 lbs CO2 per MMBTU of heat input eliminates use of the highest GHG-emitting fuels (coals) unless controls such as carbon capture and sequestration (CCS) are implemented to reduce the intensity of GHG emissions. This level is similar to the level recently adopted by the State of New York for most existing major electric generating facilities at 6 NYCRR Part 251. Note that CO2 is used as a surrogate for all GHGs, as it is the most significant contributor to GHG emissions from fuel burning sources and that using a CO2 equivalent (CO2e) standard would have a nearly identical effect, but make reporting and compliance determinations more complicated.

Comment #2: Lack of Compliance Options: The rule's design is an absolute emissions limitation with no alternatives for well operated and controlled sources that could operate above the limit. Given the well-known challenge of controlling CO2 emissions economically post-combustion, the rule seems deficient in not providing alternative options for sources that may not be able to achieve the absolute standard. Therefore, as proposed, the rule could prohibit operation of well controlled and operated sources without incorporation of compliance alternatives.

DOEE Response: This is a GHG standard (using CO2 as a surrogate for total GHGs). Adding controls that would reduce the amount of CO2 emitted per BTU of fuel burned (such as CCS) would, in fact, allow any source to comply with the standard. A unit that had no controls installed for GHGs would not be considered a well-controlled source for GHGs. While it is recognized that post-combustion controls for CO2 are expensive, this expense is warranted to ensure that high carbon fuels are not used uncontrolled.





Comment #3: Possible Compliance Options to Consider: We suggest that DOEE could improve the rule by considering the following alternatives as regulatory compliance options:

- Provide for an emission limitation averaging period that is greater than one day and allow averaging across fuels. For example, consider an annual average option as certain EPA GHG regulations allow.
- Allow for a site-wide average limitation. For facilities that operate multiple units, provide an option to average the emissions of all sources at a site as a compliance options like certain EPA regulations allow.
- Include an option to create or procure CO2 allowances for emissions above the CO2 limitation.
- Provide an option in the rule to set a source-specific CO2 emission limit.
- Provide an allowance for backup fuels which are unable to meet the limitation such as an annual fuel usage limitation or capacity factor limitation.

DOEE Response: The intent of the regulation is to phase out uncontrolled use of high carbonintensity fuels. All of the above proposed options would allow continued uncontrolled use of high carbon-intensity fuels, which is not consistent with the Clean Energy DC Plan and the District's Sustainable DC Plan. For the averaging options (site-wide or over time), any source would be able to comply merely by increasing emissions from lower intensity fuels, which would be counter to the intent of reducing GHG emissions. An allowance system, while cumbersome to implement, would effectively accomplish the same goal by, in effect, allowing averaging across facilities. Providing an exception for back-up fuels would effectively nullify the value of the regulation in that high carbon-intensity fuels are already commonly used only as back-up fuels in the District. This would mean that no significant GHG emission reductions would be achieved by the regulation.

Comment #4: Compliance Timeline: Extend the effective date to allow a longer compliance timeline for existing sources.

DOEE Response: DOEE has determined that an extension of the originally proposed effective date is appropriate to provide owners and operators affected by the rule sufficient time to make provisions to comply with the rule. As such, the rule has been revised, with the addition of a new § 807.5, to provide a deadline for compliance of March 31, 2023, with an option for a limited extension until March 31, 2025 where operation on the otherwise non-compliant fuel type or component fuel could only occur during certain limited circumstances, consisting of the following:

- a) For periods of tuning and testing on the otherwise non-compliant fuel type or component fuel, not to exceed a total of 48 hours during any calendar year;
- b) During periods of involuntary natural gas supply interruptions, which does not include interruptions resulting from gas curtailment resulting from an interruptible gas supply contract;

- c) During periods of extreme cold weather where the facility affected by this rule would not be capable of providing a reasonable service to its supported facility or facilities through use of other fully compliant fuel types; and
- d) During any "Force Majeure" event which prevents the source from providing a reasonable level of service to its supported facility or facilities through use of other fully compliant fuel types, where "Force Majeure" is defined as any of the following:
 - 1) Act of God (such as, but not limited to, fires, explosions, earthquakes, hurricanes, tornados, tidal waves, and floods);
 - 2) War, hostilities (whether war is declared or not), invasion, act of foreign enemies, mobilization, requisition, or embargo;
 - 3) Rebellion, revolution, insurrection, or military or usurped power, or civil war;
 - 4) Riot, strikes, or lock outs associated with fuel delivery; and
 - 5) Acts or threats of terrorism that impact or threaten to impact the source.

A requirement to establish associated record keeping and reporting requirements related to these circumstances was also added.