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Docket No. EPA-HQ-OAR-2021-0382

December 21, 2021

Ms. Nabanita Modak Fischer
Fuels and Incineration Group
Sector Policies and Programs Division (E143-05)
Environmental Protection Agency
Research Triangle Park, NC 27711

RE: AGA's Comments on Potential Future Regulation Addressing Pyrolysis and Gasification Units, 86 Fed. Reg. 50296 (Sept. 8, 2021); Notice of Filing Deadline Extension (Nov. 5, 2021)

Dear Ms. Fischer:

The American Gas Association ("AGA") appreciates the opportunity to comment on EPA's advance notice of proposed rulemaking (Advance Notice) regarding potential future regulation addressing pyrolysis and gasification units under Clean Air Act section 129.

We urge you to ensure that any regulatory changes you consider will not inadvertently impede the beneficial use of these technologies to produce pipeline quality renewable natural gas (RNG) and hydrogen, which can result in significant reductions of greenhouse gases (GHG) and other emissions and are important for meeting net zero carbon goals consistent with the President's priorities for addressing climate change.

The American Gas Association, founded in 1918, represents more than 200 local energy companies that deliver clean natural gas throughout the United States. There are more than 76 million residential, commercial, and industrial natural gas customers in the U.S., of which 95 percent — more than 72 million customers — receive their gas from AGA members. AGA is an advocate for natural gas utility companies and their customers and provides a broad range of programs and services for member natural gas pipelines, marketers, gatherers, international natural gas companies, and industry associates. Today, natural gas meets more than thirty percent of the United States' energy needs. The scale of importance of natural gas and its delivery systems and their role in providing safe, affordable, reliable, and resilient energy service choices to customers cannot be understated. AGA is committed to reducing greenhouse gas emissions through smart innovation, new and modernized infrastructure, and advanced technologies that maintain reliable, resilient, and affordable energy service choices for consumers.

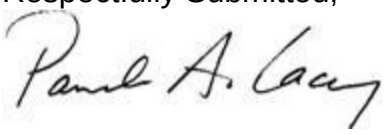
Pyrolysis and gasification technologies are gaining increasing interest as a means for producing RNG or hydrogen from organic wastes. For example, the Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE) has a research program focused on developing gasification and pyrolysis of biomass to produce hydrogen.[1] The Gas Technology Institute (GTI) also has conducted research in both technologies, most recently focusing on their use in producing RNG and hydrogen. Importantly, these technologies can help reduce both greenhouse gas and conventional pollutant emissions. GTI has found for example that gasification reduces emissions *exponentially* over traditional combustion while producing syngas that can be processed to produce downstream products such as hydrogen and RNG. This is illustrated in the GTI chart provided in Attachment A, which shows vastly lower emissions from gasifying wood waste to make RNG for energy as compared to emissions from an existing biomass power plant using traditional wood boilers to make steam to drive a turbine. The gasification process also provides a concentrated CO2 stream that can be sequestered or coupled with hydrogen to make additional RNG.

AGA requests that EPA amend footnote 4 in section 20 of the draft questionnaire posted in Docket ID No. EPA-HQ-OAR-2021-0382 in order to collect useful information about whether a pyrolysis or gasification unit is used to produce hydrogen, biogas or RNG. Section 20 asks for information about *"outputs (i.e., products, by-products, intermediates, waste) from the pyrolysis/gasification unit per year),"* and the first column requests the *"Output material category."* Footnote 1 states that the respondent should *"indicate the category of output material"* from a list of possible outputs, which includes syngas. The fourth column seeks information on "material usage" which footnote 4 explains should *"briefly describe how the output material is used or disposed (e.g., recycled, chemical feedstock, landfilled, further refined, used on-site for energy/heating, sent off-site for energy/heating.)"* To ensure that respondents understand they should indicate if their unit produces a syngas that is further processed into hydrogen, biogas or RNG, we ask that EPA add the phrase "further processed into hydrogen, biogas or RNG for onsite or offsite energy."

[1] See https://www.energy.gov/eere/fuelcells/doe-technical-targets-hydrogen-production-biomass-gasification (last accessed Dec. 21, 2021).

If you have any questions, please contact me or Tim Parr, AGA Deputy General Counsel at tparr@aga.org.

Respectfully Submitted,



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Dated: **December 21, 2021**

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Enclosure: **Attachment A** – Comparison Chart: Gasification to RNG Emissions Profile Compared to Biomass Power Facilities, copyright Gas Technology Institute (GTI), used with permission.