



**GROUP AGAINST SMOG &
POLLUTION**

**1133 South Braddock Avenue, Suite 1A
Pittsburgh, PA 15218
412-924-0604
gasp-pgh.org**

June 8, 2021

VIA EMAIL

Allegheny County Health Department
Air Quality Program
301 39th St., Bldg. 7
Pittsburgh, PA 15201
aqpermits@alleghenycounty.us

**Re: Comments of Group Against Smog and Pollution Regarding the Draft
Installation Permit for Invenergy Allegheny Energy Center
(Permit # 0959-I001)**

Dear Sir or Madam:

Please accept these comments regarding the draft Installation Permit (#0959-I001) (the "Permit") for Invenergy Allegheny Energy Center (the "Facility"), which I am submitting on behalf of the Group Against Smog and Pollution. According to the notice posted on its website, the Allegheny County Health Department ("ACHD") is accepting comments on the Permit through June 8, 2021.

Very truly yours,

/s

John K. Baillie
Senior Attorney

**COMMENTS OF THE GROUP AGAINST SMOG AND POLLUTION
REGARDING THE DRAFT INSTALLATION PERMIT FOR
INVENERGY ALLEGHENY ENERGY CENTER (# 0959-I001)**

Once constructed and operating, the Facility will be a major source subject to the requirements of Title V of the Clean Air Act and the implementing regulations at 40 C.F.R. Part 70. Because the Facility ultimately will be subject to those requirements, the Department should, follow them in issuing the Facility's installation permit.¹

For each draft Title V Operating Permit, the implementing regulations in 40 C.F.R. Part 70 require the permitting authority to prepare "a statement that sets forth the basis for the draft permit conditions,"² including, without limitation, the permit's emission limits. Such a statement must provide a clear basis for emission limits for hazardous air pollutants ("HAPs") in the permit, and properly document all calculations of HAP emissions.³ Further, the permitting authority must support the emission factors that it uses to determine HAP emission limits, by explaining how the emission factor that it selects for each HAP "adequately accounts" for HAP emissions.⁴

The Department's Technical Support Document (the "TSD") for the Permit calculates HAP emissions from the combustion sources at the Facility, including the Combustion Turbine and Duct Burner.⁵ Generally, the Department's calculations are based on emission factors from Table 3.1-3 of EPA's AP-42 *Compilation of Air Pollutant Emissions Factors* insofar as they

¹ See Art. XXI, § 2102.04.e (stating that ACHD "may" issue an installation permit "subject to such terms and conditions as are appropriate to ensure continued compliance with the requirements of ... the Clean Air Act").

² 40 C.F.R. § 70.7(a)(5).

³ *In the Matter of Pope and Talbot, Inc.*, 2007 EPA CAA Title V LEXIS 3, *28 (March 22, 2007).

⁴ *In the Matter of Piedmont Green Power, LLC*, 2016 EPA CAA Title V LEXIS 6, *45 (Dec. 13, 2016).

⁵ See Technical Support Document, App. A, at 32.

estimate the Combustion Turbine's emissions of HAPs, and emission factors from AP-42's Table 1.4-3 insofar as they estimate HAP emissions from the Duct Burner.

I. THE TSD MUST CALCULATE EMISSIONS OF PAHs FROM THE FACILITY'S COMBUSTION TURBINE BASED ON THE EMISSION FACTOR FROM AP-42'S TABLE 3.1-3

Although Table 3.1-3 of AP-42 includes an emission factor for polycyclic aromatic hydrocarbons ("PAHs"), the TSD does not use it (or any other emission factor) to determine PAH emissions from the Facility's Combustion Turbine. The TSD must either explain why – despite the availability of an applicable, EPA-approved emission factor – it is proper to omit PAH emissions from the Combustion Turbine from the TSD's determination of the Facility's total HAP emissions or use that emission factor to determine such emissions and include them in the totals for the Facility.

II. THE TSD MUST SUBSTANTIATE ITS CALCULATION OF HEXANE EMISSIONS FROM THE FACILITY'S COMBUSTION TURBINE

Instead of using the emission factor for hexane from AP-42's Table 1.4-3 to estimate hexane emissions from the Facility's Duct Burner, the TSD uses an emission factor for hexane developed by the Air Pollution Control District for Ventura County, California and published in the document *AB 2588 Combustion Emission Factors* ("AB 2588"). The TSD does this purportedly because the hexane emission factor from Table 1.4-3 is rated "E," or "poor," and "is considered unreasonably high."⁶ However, the TSD does not cite any authority to support its assertion that Table 1.4-3's emission factor for hexane is "unreasonably high." Nor does the

⁶ TSD, App. A, at 32 note (c). It is worth noting that the TSD uses numerous other emission factors from AP-42 Tables 1.4-3 and 3.1-3 that are rated "E" in its calculations of the Facility's HAP emissions without caveat.

TSD explain why the unrated emission factor for hexane from AB 2588 is thought to be any more accurate than its counterpart in AP-42. The TSD's omission of such authority and explanation makes it appear that the Department chose the emission factor for hexane arbitrarily.

The TSD must properly document its estimates of a facility's HAP emissions⁷ and explain how the emissions calculations that it does make "adequately account" for such emissions.⁸ Accordingly, the TSD must cite valid authority to support its assertion that AP-42's emission factor for hexane is "unreasonably high," and should also explain AB 2588's unrated emission factor for hexane better predicts how much hexane the Facility's Duct Burner will emit.

III. THE TSD MUST CALCULATE EMISSIONS OF ACETALDEHYDE, ACROLEIN, PROPYLENE, XYLENES, ETHYLBENZENE, AND PAHs FROM THE FACILITY'S DUCT BURNER BASED ON AB 2588'S EMISSION FACTORS

The TSD does not calculate emissions of the HAPs acetaldehyde, acrolein, propylene, xylenes, ethylbenzene, and PAHs from the Facility's Duct Burner, even though AB 2588 provides emission factors for such emissions and the TSD used AB 2588's emission factor for hexane to determine the Duct Burner's hexane emissions. The TSD must either explain why – despite the availability of applicable, purportedly reliable emission factors – it is proper to omit emissions of these HAPs from the Duct Burner from the TSD's determination of the Facility's total HAP emissions or use that emission factors to determine such emissions and include them in the totals for the Facility.

⁷ *In the Matter of Pope and Talbot, Inc.*, 2007 EPA CAA Title V LEXIS 3, *28.

⁸ *In the Matter of Piedmont Green Power, LLC*, 2016 EPA CAA Title V LEXIS 6, *45.