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Mr. Patrick Lessard
Air Quality Policy Division
United States Environmental Protection Agency (EPA)
Office of Air Quality Planning and Standards (C504-05)
Research Triangle Park, NC 27711

Submitted via email to: efcomments@epa.gov and Lessard.patrick@epa.gov

**Subject: Comments on EPA's Draft Revisions to AP-42
Chapter 2, Section 4 – Municipal Solid Waste Landfills**

Dear Mr. Lessard:

Aptim Environmental & Infrastructure, LLC (APTIM), through its subsidiary LFG Specialties, LLC, has manufactured landfill gas collection and control equipment for over 35 years. As an industry leader in the design and fabrication of utility, enclosed, and ultra low emission flares, we have reviewed the EPA's draft AP-42 document and are submitting the following comments for consideration:

1. Table 2.4-3 should also include control efficiencies for open flares as a separate control device and corresponding Source Code. Table 2.4-3 Footnote C states "...test data were taken from enclosed flares. *Control Efficiencies are assumed to be equally representative of open flares*" (emphasis added). Based on operating temperatures, in APTIM's experience, the control efficiency of enclosed flares would generally be higher than the control efficiency of open flares for nitrogen oxides (NO_x), carbon monoxide (CO), and non-methane organic compounds (NMOCs). We request that the emission factors for Open Flares be based on AP-42 Section 13.5 Industrial Flares. Specifically, Table 13.5-1 identifies an emission factor of 0.068 lb NO_x/MMBTU fired and Table 13.5-2 identifies an emission factor of 0.31 lb CO/MMBTU fired. We request that these emission factors continue to be applicable to open flares that are operated on landfills.
2. The proposed Emission Rates in Table 2.4-5 for Enclosed Flare/Combustor (50300601) for NO_x, NMOC, and CO are inaccurate for enclosed flares as a single class. A review of the data provided in Table 2.4 rd4 factor1data NO_x, Table 2.4 rd4 factor2 NMOC, and Table 2.4rd4 factor3data CO include facilities that have both enclosed and Ultra Low



Emission (ULE) flare design and construction. The ULE flares have a lower NOx and CO emission rates by their design and operation and were developed to meet the more stringent emission limits in select states and/or air districts. Additionally, the data used to develop the new factors appear to look at NOx and CO independently. However, NOx and CO emissions from combustion are inversely related. As combustion temperature increases, CO emissions drop while NOx emissions increase. To accurately interpret NOx and CO measurements, they need to be tied together and key pieces of data, including operating temperature and percent of maximum capacity, need to be considered. As way of example, APTIM’s guaranteed emission rates for LFG Specialties’ Enclosed and ULE flare are as follows:

Parameter	Enclosed flare	ULE flare
NOx	0.06 lb/MMBTU	0.025 lb/MMBTU
CO	0.2 lb/MMBTU	0.06 lb/MMBTU
NMOC	98% destruction or 20 ppmv	98% destruction or 20 ppmv

As a result, we are requesting that EPA provide a separate emission factor for enclosed and ULE flares operated on landfills.

3. The Introduction section of AP-42 states that emission factors presented “are **neither** EPA-recommended emission limits...**nor** standards. Use of these factors as source-specific limits and/or emission regulations compliance determinations is **NOT** recommended by EPA. In addition, the Introduction states “if representative source-specific data cannot be obtained, emissions information from equipment vendors...is a better source of information for permitting decisions than an AP-42 emission factor.” APTIM completely endorses this approach; however, we’ve experienced instances where this is not the case and AP-42 emission factors have been incorporated into air permit limits. To highlight EPA’s intent to users that may not read the Introduction, we request that a footnote be added to Tables 2.4-3, 2.4-4, and 2.4-5 restating this stance of EPA and emission factors or at a minimum referring the user to the AP-42 Introduction section on the appropriate use of emission factors.

APTIM appreciates the opportunity to provide comments on EPA’s proposed AP-42 Section 2.4. If you have any questions or need additional information, please reach out to me at the numbers provided.

Sincerely,

Lee Zink

Flare Product Manager

APTIM | LFG Specialties, LLC

cc: Russell M. Keckler III – APTIM | Solid Waste Services