STAPPA / ALAPCO

STATE AND TERRITORIAL
AIR POLLUTION PROGRAM
ADMINISTRATORS

ASSOCIATION OF
LOCAL AIR POLLUTION
CONTROL OFFICIALS

S. WILLIAM BECKER
EXECUTIVE DIRECTOR

July 5, 2006

U.S. Environmental Protection Agency
Air Docket
Mailcode: 6102T
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

Re: Docket I.D. EPA-HQ-OAR-2003-0199

Dear Sir or Madam:

On behalf of the State and Territorial Air Pollution Program Administrators (STAPPA) and the Association of Local Air Pollution Control Officials (ALAPCO), the two national associations of clean air agencies in 54 states and territories and more than 165 metropolitan areas across the country, thank you for the opportunity to comment on the proposed rule titled "Alternative Work Practice to Detect Leaks from Equipment" (71 *Federal Register* 17401, published April 6, 2006). We also appreciate the 30-day extension of time for commenting on this significant proposal.

Our associations strongly support development of optical gas imaging technology for a variety of air emissions applications. Currently, optical gas imaging cameras are being used by some agencies for such purposes as screening for leaks, providing "leads" to potential violations of emissions requirements, identifying previously unknown or unaccounted for sources, auditing facilities subject to leak detection and repair (LDAR) requirements in order to uncover fugitive VOC emissions at unregulated equipment, and identifying sources of emissions in areas with elevated concentrations of pollutants.

Agencies who have purchased the optical gas imaging cameras have found them particularly useful in identifying leaks from unconventional sources, such as rail car loading, heat exchangers, wastewater collection facilities, and barges. One agency reported recently that the camera, utilized remotely by helicopter overflight, identified numerous sites with visible infrared plumes. Based on the overflight and follow-up reviews of emissions data, an additional 6,000-7,000 tons per year of unreported volatile organic compounds (VOCs) have been accounted for. Others have found the camera particularly useful in monitoring compliance with Stage 2 vapor recovery requirements.

444 North Capitol St. N.W. Washington, D.C. 20001 Tel. (202) 624-7864 Fax (202) 624-7863

Although optical gas imaging can potentially be useful as a method of leak detection and repair when operated in conjunction with Federal Reference Method 21 ("Method 21"), we believe that the currently proposed rule is premature and that final promulgation would be ill-advised. The proposed rule raises enforcement and technical concerns that must be addressed before promulgation. Use of the camera by sources should only be undertaken in accord with clear regulatory directives; additionally, the camera should be used only for purposes for which it is suited. We urge EPA to redraft and repropose the rule in order to address the following concerns:

<u>The Proposed Language in the General Provisions of 40 CFR 60 (NSPS), 61 (NESHAPs), and 63 (MACT) Is Unenforceable and Legally Insufficient</u>

EPA has requested comment on whether the proposed language provides sufficient legal authority for a source to utilize the alternate work practice (AWP) for complying with the LDAR requirements. The agency states that it is "contemplating incorporating the appropriate rule language for the AWP into the General Provisions of 40 CFR parts 60, 61, 63 and 65" rather than amending all of the applicable subparts. STAPPA and ALAPCO strongly oppose incorporating the AWP into the General Provisions rather than amending all of the applicable subparts.

Arteva Specialties, which EPA references in the proposed rule, states that, "if EPA demonstrates on remand that a cost effective and practicable alternative to Method 21 exists for each leak source, and **expressly provides for the alternatives in the standard,**" then such alternatives will be considered reasonable (emphasis added). In the *Arteva* case, the standard referred to is the standard "to reduce emissions of hazardous air pollutants from plants that manufacture a group of polymers and resins, including polyethylene terephthalate resin (PET), National Emissions Standards for Hazardous Air Pollutant Emissions: Group IV, Polymers and Resins: Final Rule, 61 Fed. Reg.48, 208 (Sept. 12, 1996) (Group IV NESHAP), pursuant to section 112 of the Clean Air Act...the equipment leak standard of Group IV NESHAP…" Thus, the D.C. Circuit Court of Appeals held that an alternative to Method 21 should be expressly incorporated into the specific standard governing sources subject to the Group IV NESHAP standard.

Applying the *Arteva* decision to the proposed rule, EPA must incorporate the optical gas imaging alternative to Method 21 into all of the applicable NSPS, NESHAPS and MACT subpart standards rather than only including blanket language in the General Provisions. In the context of the case, the "standard" referred to is the specific Group IV NESHAP standard applicable to the petitioners. EPA will achieve legal sufficiency and enforceability of the proposed AWP only by including language providing for the optical gas imaging alternative to Method 21 where it will be readily apparent to the affected industry groups, the appropriate regulators, and the public—in each applicable subpart setting forth an industry standard contained in 40 CFR 60, 61, 63 and 65.

A regulatory short cut that includes language in the General Provisions in a scant two and a half pages, does not provide the certainty and specificity needed both for the regulated community and for our agencies, which must enforce the requirements. Inclusion of the optical gas imaging alternative only in the General Provisions is likely to result in numerous inconsistencies with the requirements of the specific subparts due to the lack of any detailed regulatory analysis.

Confusion and misinterpretation concerning the applicability of the General Provision of 40 CFR section 60.18 to particular sources are highly likely to occur if the rule as drafted is finalized. For example, some publicly owned treatment works that are subject to a standard for maximum achievable control technology (MACT) under 40 CFR Part 63 Subpart VVV are not subject to any general standard under Part 60, raising a question about whether EPA intended the AWP to be applicable to such a facility. In another example of potential confusion, section 63.1363(a) (2) of Subpart MMM provides, with regard to the MACT standard for pesticide active ingredient production, that "after the compliance date for a process, equipment subject to both this section [63.1363] and either of the following will be required to comply only with the provisions of this subpart [MMM]: i) 40 CFR Part 60; ii) 40 CFR Part 61." Thus, it is unclear whether, "after the compliance date," this source category will be able to use optical gas imaging as an AWP.

In sum, sources, state and local agencies, and the public will be hard-pressed to make these determinations, again demonstrating the need to avoid the proposed Section 60.18 adoption mechanism and to promulgate specific language into each individual NSPS, NESHAPS or MACT standard. Only in this way will sources understand the requirements relating to their use of optical gas imaging, and will state and local authorities be able to enforce the appropriate use of this new technology.

Optical Gas Imaging Is Not Currently Technically Equivalent to Method 21

EPA's proposal states that "any new work practice must be as equally protective of the environment as the current work practice" (71 *Federal Register* at 17404). The optical gas imaging technology, however, does not appear to be as protective as the current work practice required by Method 21 for the following reasons:

1. The camera cannot detect small, pinpoint leaks of less than 60 grams per hour (g/hr). In fact, the proposed rule states that a side-by-side comparison with Method 21 and the optical gas imaging device demonstrated that Method 21 detected 49 out of 66 leaks, while the camera detected 31. The associations question whether a leak detection rate of approximately 52 percent compared to 82 percent is equally protective. Moreover, we question whether the proposed increased frequency of monitoring to detect larger leaks will actually compensate for the camera's inability to detect small leaks. Moreover, small high-risk leaks of carcinogens, such as benzene, 1-3 butadiene, and vinyl chloride, will simply continue to leak until the time that they become large enough to be detected by the camera.

2. The proposed rule does not acknowledge that the mass flow rate of leaks will generally vary. "Small" leaks that have not been detected by the camera can increase depending on flow rates through components and changing operating parameters, such as chemical activity, temperature, and pressure.

3. EPA's 60 g/hr detection limit was arrived at by conducting tests on leaking valves. Other components, such as flanges, were not – and should be – tested for leak rates and taken into account in a reproposed rule. An AWP rule should be based on leaks from all or most commonly used components, rather than valves alone.

An AWP for LDAR Must Provide for Training in Proper Operation of the Optical Gas Imaging Camera

Thorough training in the use of the gas imaging instrument will be necessary. The effectiveness of the proposed alternative work practice depends on the ability and expertise of the individual using the technology. In particular, the individual must be able to accurately and reliably calibrate and adjust the camera under a variety of conditions and be trained to evaluate the image of a potentially leaking component. Evaluating an image to determine what is or is not a plume of emissions leaking from a component is much more complicated than reading the numerical output on a typical Method 21 fugitive monitoring instrument used in the current work practice. EPA should include in a reproposed regulation provisions for mandatory training and certification in the use of the camera to insure that it is used properly. Annual recertification should also be required.

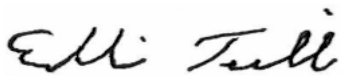
STAPPA and ALAPCO Recommend that EPA Revise the Proposed Rule, Incorporating Regulatory Language into the Specific Subparts, and Reevaluating the Functions for Which the Camera Is – and Is Not – Technically Suited

In accord with this comment, we urge EPA to incorporate the AWP, using the optical gas imaging technique, into all of the relevant Subparts (rather than the General Provisions) to provide a legally sufficient and enforceable rule. Furthermore, we encourage EPA to take a more realistic and creative view of the camera's possibilities. The associations believe that the camera should currently be used as a valuable adjunct to – rather than replacement of – Method 21.

Agencies who have experience with the camera believe it is invaluable for detecting leaks from traditionally unregulated components, such as heat exchangers, cracks in pipes, and insulated pipes – none of which can be well detected with Method 21. And, as mentioned, STAPPA and ALAPCO are extremely enthusiastic about using the camera for applications other than as an AWP for LDAR, such as screening for leaks, overflight visualization, and finding enforcement leads from unconventional sources such as barges, rail car loading, wastewater collection, storage tanks, and the like.

Finally, STAPPA and ALAPCO suggest that a stronger rule – one that identifies all appropriate regulatory areas for use of the camera – can be devised if the process of developing the regulation includes the views and experiences of our agencies, some of which have had significant practical experience using the camera. EPA's proposal notes that the American Petroleum Institute (API) initiated EPA's work on equivalency (with Method 21), based on studies involving API, EPA, and the Department of Energy that were "designed to conduct LDAR in a more cost-effective manner." Our programs support appropriate cost savings measures. Nonetheless, we believe that inclusion of the opinions and experiences of state and local programs in a reopened regulatory process will insure that the regulation is technically effective, as well as cost-effective.

We appreciate the opportunity to provide these comments to you. If you have any questions about these comments or desire further information, please do not hesitate to contact one of us or Mary Stewart Douglas of STAPPA and ALAPCO.



Eddie Terrill

Felicia Robinson