March 2013

Clean Water Act Analytical Methods Update Rule -Decision on Alternative Oil and Grease Method

Background

EPA has published in a *Federal Register* Notice a final decision on its consideration of approving, in the Code of Federal Regulations (CFR) at Title 40 Part 136, an alternative laboratory analytical method for oil and grease. Part 136 methods are test procedures used for determining compliance with National Pollutant Discharge Elimination System (NPDES) permit limits and for other Clean Water Act monitoring purposes.

Oil and grease, collectively referred to as a single pollutant, is made up of a mixture of petroleum-based and vegetable-based chemical compounds that vary from source to source. It is present in a wide variety of industrial and municipal discharges and is included in hundreds of thousands of wastewater discharge permits. Oil and grease is a method-defined parameter. That is, the analytical results obtained are dependent on the particular method used.

The two Part 136 oil and grease methods EPA has approved are liquid/liquid extraction (LLE), gravimetric procedures that employ a solvent to extract the oil and grease. The analytical method under consideration (ASTM D-7575) was published by ASTM International for the determination of oil and grease. ASTM D-7575 utilizes a solventless extraction (i.e., a membrane filter) and infrared absorption to measure oil and grease.

EPA first discussed this alternative oil and grease method in its 2010 proposed Methods Update Rule (MUR). As explained in the proposed MUR, EPA generally does not approve alternative methods for oil and grease based on different extraction and/or measurement techniques because it is unclear how to translate

measurements using these alternative methods to those obtained under existing methods for purposes of comparison.

Based on comment and additional data it received on ASTM D-7575 in response to the proposed MUR, EPA considered revising its regulatory requirements for oil and grease. EPA was particularly persuaded by the substantial advantages associated with the "green" aspects of the method's membrane technology (e.g., it does not use an extraction solvent and, therefore, there is no solvent waste and no analyst exposure to the solvent). EPA subsequently published a Notice of Data Availability (NODA) in the Federal Register on this alternative method. The NODA included additional data received since the proposal and requested comment on whether and how EPA should approve the method in Part 136 as an alternative oil and grease method.

What Did EPA Decide About This Alternative Oil and Grease Method?

After a thorough review of all comments to the MUR and NODA and supporting data, EPA is not approving ASTM D-7575 for nationwide use as an alternative to oil and grease methods in 40 CFR Part 136. While a non solvent-based method would be advantageous, EPA has concluded that this new method is not demonstrated to produce results comparable to those achieved using the current Part 136 methods in the wide ranges of discharges to which oil and grease limitations may apply. EPA nonetheless encourages permittees to consider whether or not this method may be an acceptable alternative to the current methods for their specific discharge, and if supported by data showing the method achieves comparable results in their particular discharge, to request approval of this alternative method for their specific application. Such requests for approval as a limited use alternative test procedure may be

made using EPA's existing Alternate Test Procedures process explained at 40 CFR Part 136.5.

For more information

You can view the Federal Register Notice at http://water.epa.gov/scitech/methods/cwa/index.cfm. In addition, the Notice will be available at http://www.regulations.gov under Docket ID: EPA-HQ-OW-2010-0192.

You may also send an email to Jan Matuszko at matuszko.jan@epa.gov.