



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

NOV 25 2019

OFFICE OF  
LAND AND EMERGENCY  
MANAGEMENT

Mr. Tom Rinehart  
Regulatory Affairs Manager  
Chevron Environmental Management and Real Estate Company  
Environmental Management – Regulatory Affairs  
685 South Chevron Way  
North Salt Lake, UT 84054

Dear Tom,

Thank you for your July 3<sup>rd</sup>, 2019, email to EPA's Office of Resource Conservation and Recovery (ORCR) in which you described certain challenges regarding the use of analytical methods in the management and assessment of fuel release sites. You described how some states interpret EPA guidance such as EPA's *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods* (SW-846) under their respective state programs. For example, regarding the analysis of petroleum hydrocarbons in environmental samples using SW-846 Method 8015, you noted that some regulators may be reluctant to approve the use of sample cleanup methods (e.g., silica gel) together with Method 8015, because the cleanup methods are not specifically mentioned in EPA Method 8015. I hope this letter helps clarify EPA's position on this issue.

As you know, how an environmental sample is prepared and analyzed can depend upon the purpose of a particular measurement (e.g., regulatory requirements, desired target analytes, necessary quantitation limits, etc.). As you pointed out, there is a variety of approaches that states may take when requiring the measurement of petroleum hydrocarbons (as TPH, or Total Petroleum Hydrocarbons) in environmental samples. EPA found that in a voluntary survey by the Interstate Technology and Regulatory Council, state agencies who responded were evenly split between allowing and not allowing silica gel cleanups such as Method 3630. One quarter of the state respondents allow the use of data with or without a silica gel cleanup method, and a number of states indicated that silica gel cleanups are only to be used to remove naturally occurring polar compounds.<sup>1</sup> Different state practices indicated in these survey results could be due to different state priorities or requirements, or other factors.

Method 8015C, titled "Nonhalogenated Organics by Gas Chromatography" specifically states that it measures nonhalogenated volatile and semivolatile organic compounds and that it may be applicable to compounds other than those listed in Sections 1.1 and 1.2 of the method. While Method 8015C does not specifically list all appropriate sample preparation and cleanup methods that may be combined with it, it clearly states "[i]f an extract cleanup procedure is performed, refer to Method 3600 for the appropriate QC procedures." This is consistent with EPA's view that it is acceptable to pair a variety of

---

<sup>1</sup> ITRC, Total Petroleum Hydrocarbons (TPH) Risk Evaluation at Petroleum Contaminated Sites, Appendix C

cleanup methods with Method 8015C, such as Method 3630C (Silica Gel Cleanup) depending on the project needs. We do not agree that just because Method 3630C (or other cleanup method appropriate to the objectives of the analysis) is not specifically mentioned in the description of Method 8015 in SW-846, that one need conclude that this cleanup method is not allowed to be used with Method 8015.

To summarize, Method 8015C may be used in conjunction with Method 3630C depending upon project goals, as described above. For additional information, the SW-846 website provides guidance on the flexibility of SW-846 methods,<sup>2,3,4</sup> which EPA believes is sufficient for states to make their own determinations on how much flexibility to allow in method use supporting RCRA. I hope you find this information helpful, and please feel free to contact me at 703-308-0490. Thank you again for your efforts in the safe management and assessment of fuel release sites.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kim Kirkland', written in a cursive style.

Kim Kirkland, Chief  
Waste Characterization Branch  
Office of Resource Conservation and Recovery

---

<sup>2</sup> SW-846 Methods Innovation Rule, <https://www.epa.gov/hw-sw846/final-rule-methods-innovation-rule-mir>

<sup>3</sup> SW-846 Policy Statement, <https://www.epa.gov/hw-sw846/policy-statement-about-test-methods-evaluating-solid-waste-physicalchemical-methods>

<sup>4</sup> SW-846 Chapter 2, <https://www.epa.gov/hw-sw846/chapter-two-sw-846-compendium-choosing-correct-procedure>