

ASTM Environmental “Phase One Standard” reaches one year anniversary - by Chuck Merritt



Chuck Merritt

The American Standard of Testing Materials (ASTM) Environmental Site Assessment (ESA) standard E-1527-21 received approval to be enacted from the EPA on March 14, 2022. The standard also received congressional approval that it also meets the All-Appropriate Inquiry (AAI) Rule. However, the prior standard (E-1527-13) was allowed to be used until it was officially sunset in February of 2024.

With every set of revisions that accompany a new standard, the hope is to achieve a better work-product and consultants who prepare phase one ESA reports will compete on a level playing field. It is important to remember that the purchaser of the property has the most to gain (or lose) by having the correct report to protect their interest and achieve certain legal protections as part of the Comprehensive Environmental Response, Compensation & Liability Act (CERCLA). Some of the notable changes included a more comprehensive look at adjacent/adjoining since there is a potential that one or several of these properties may have caused an impact to the

soil/groundwater/air quality based on current or historical usage of the nearby properties.

A major difference with the 21-standard compared to prior versions of E1527, is the issue of emerging contaminants or forever chemicals. There are thousands of these compounds that have been used for decades. However, they were not originally required in the 21-standard since they were not classified as hazardous substances by the Federal Environmental Protection Agency (EPA).

That changed in July of 2204 when the Federal EPA listed several of them as hazardous substances. Per- and polyfluoroalkyl substances (PFAS) and Perfluorooctanoic acid (PFOA) being the most widely used. When that occurred, anyone looking to obtain CERCLA protection (mainly purchasers of commercial real estate) within the phase one report needed to make sure this was covered by the due diligence firm they retained.

The suite of forever chemicals is so pervasive, chances are you may find them when looking for them. This would occur during the sampling stage, more commonly known as the phase two investigation. It is when these chemicals end up in the drinking water supply where the danger lies. Ingesting forever chemicals and the long-term effects have been studied and continue to be studied for their contribution to many types of cancers. This has prompted public water municipalities to file lawsuits against the large chemical manufacturers responsi-

ble for developing and patenting products that contain forever chemicals.

The allowable amount of these chemicals is measured in parts per trillion which is the main reason you will find them everywhere compared to other contaminants measured in parts per million or parts per billion. PFAS and PFOS chemicals are found in hundreds of household chemicals along with industrial uses in which greater amounts of the chemicals were used. Studies have indicated that approximately 97% of Americans have PFSA in their system. Currently these chemicals are very difficult to remediate so identifying them through sampling may or may not provide value to the end user. To determine if such testing is warranted, consultants are tasked within their phase one ESA reports to figure out if the historical uses of the site or adjacent/adjoining properties may have caused the release of such chemicals.

Buyers (more than lenders) need to understand the ramifications of purchasing a site that may have PFAS/PFOS chemicals in the groundwater for several reasons including reduction in the value of the property, ability to sell a property in the future with this impact present, will a lending institution be comfortable making a loan if these chemicals are present? When working for a lending institution in a refinance that requires the ASTM-21 AAI compliant report, this topic can complicate the loan approval process. Once it appears in a phase one report, lenders tend to require

borrowers to rectify the situation or develop a cost to cure before closing.

Shortly after the inauguration in January of 2025, the Trump administration issued a rollback of the proposed rule to what the last EPA directed in 2024 along with other EPA regulations. There has not been any news from the administration about addressing this issue as of this article's publication date. However, the new EPA administrator (Lee Zeldin) is from Long Island and understands the issues since residents of Long Island obtain their drinking water from the aquifers underground. In addition, many industrial sites and former military installations such as the Grumman sites in Hicksville and Calverton Reality have impacted the drinking water quality.

Reality is starting to set in that forever chemicals are everywhere, nearly impossible to remediate (until more advanced technologies come to the market) and causing concerns with lending institutions about the risk of lending on properties that may have forever chemicals from historical operations on the subject property or nearby sites. The outcome of the current administration revisiting the designation of PFOA and PFAS as hazardous substances will have a large impact on how consultants preparing phase one ESA reports address these issues.

Chuck Merritt, LEED AP, is the president of Merritt Environmental Consulting Corp., Hauppauge, N.Y.