

# ASTM E 1527-21 Changes Explained

## TOPIC

## WHAT CHANGED

## WHAT TO EXPECT

### Clarification on Definitions of Recognized Environmental Conditions (RECs), Controlled Recognized Environmental Conditions (CRECs), and Historical Recognized Environmental Conditions (HREC)

The new Standard has revised the definition of RECs to provide less ambiguity regarding the “likely” presence of a release. It has also further clarified the definition of an HREC to be indicative of the past release of a hazardous substance or petroleum product that has been addressed to the satisfaction of the applicable regulatory authority AND meeting unrestricted use criteria without subjecting the property to any required controls. A review of available records will be necessary to determine if past releases have been remediated to current cleanup criteria (i.e., HREC). The presence of residual impact with associated in-place controls remains a CREC under the revised Standard.

For releases that were previously considered HRECs based on regulatory closure, the consultant needs to review the sampling and compare analytical results to current regulatory criteria which may now be classified as RECs. Additionally, as investigations and/or remediation of prior releases may not have included the assessment of all potential exposure pathways (e.g., soil vapor), there is the potential for RECs to be identified as a result. When a previously identified HREC qualifies as a REC under the new ASTM standard, the User’s decision on what, if any, further assessment they wish to pursue could include consideration of potential liability protection, their own risk tolerance, and planned future use of the Subject Property.

### Significant Data Gaps

Both Standards define a data gap as the lack or inability to obtain information required by the Standard despite good faith efforts to gather such information. The -13 Standard states that the impact of the data gap on the EP’s ability to identify RECs shall be discussed, while the -21 Standard specifically defines the term significant data gaps (SDGs) and requires that SDGs be summarized in the Opinions section of the report. The revised Standard goes on to say that if an SDG is identified, the EP should discuss whether additional information would likely assist in determining if a REC exists.

With the clarification on identifying SDGs and the requirement by ASTM that SDGs be summarized in the findings and opinions section of the report, it is likely that the use of this terminology will become more frequent alongside the overall discussion of RECs. The SDG terminology requires the consultant to note the instances where the Standard was followed but due to a lack of available information, it was not possible to form an opinion on whether a REC exists. Think of SDGs as giant question marks that remain after consulting the reasonably ascertainable sources of information. Investigating SDGs can be as critical to identifying site conditions as investigating RECs.

### Standard Historical Sources

Both the -13 and -21 standards include a list of standard historical sources to review during the Phase I ESA to help determine the use of the Subject Property back to 1940 or earliest developed use, as well as defining “developed use” as including agricultural uses and the placement of fill dirt. The -21 standard clarifies “developed use” to also include “other uses that may not involve structures.” The -21 Standard also defines the requirements on what historical sources shall be reviewed during the Phase I ESA, specifically, the new Standard indicates that at a minimum (when reasonably ascertainable), the Phase I ESA shall include a review of Aerial Photographs, Fire Insurance Maps, Local Street Directories, and Topographic Maps, and that if a source is not reviewed, the Environmental Professional shall indicate within the report the reason why. Other standard historical sources, including Building Department Records, Interviews, Property Tax Files, and Zoning/Land Use Records and other historical sources may also be reviewed to supplement research of the subject property.

Users should be aware of this change and verify that historical research in reports completed to the -21 Standard includes a review of the required historical sources and/or the Environmental Professional’s statement as to why a review was not conducted.

LaBella’s Phase I ESA process has included and will continue to include Aerial Photographs, Fire Insurance Maps, Local Street Directories, and Topographic Maps, as well as some supplemental research from additional sources to meet the overall objective of the Phase I ESA. When a standard historical resource is not reviewed, the reasoning will be summarized in the Phase I ESA report in accordance with the ASTM E 1527-21 standard.

# ASTM E 1527-21 Changes Explained, continued

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<b>Adjoining Properties</b>	Both the -13 and -21 Standards have included assessment for potential impacts resulting from surrounding area properties; however, the -21 Standard has placed an additional emphasis on current and prior uses of the adjoining properties. The revised Standard requires that obvious uses of adjoining properties be identified and that historical resources obtained during the Phase I ESA (e.g., Sanborn Maps) be reviewed (or a reason provided as to why a review was considered unwarranted by the EP).	While LaBella has been reviewing provided information regarding adjoining and nearby properties, expect to see a more expansive discussion of these uses and their potential to impact the Subject Property within Phase I ESAs completed to the new Standard.
<b>Property Use Limitations</b>	This is a new term defined in the -21 Standard as limitations or restrictions on current or future use of the Subject Property in connection with a response to a release. These limitations are placed by the regulatory authority that allows hazardous substances and/or petroleum products to remain in place at concentrations exceeding unrestricted use criteria.	This new term is a more general classification of terms previously identified as activity and use limitations in association with a CREC. While these items will be noted in the discussion of an identified CREC, it is not anticipated that this change will significantly impact the overall findings of a Phase I ESA completed to the new Standard.
<b>Report Format</b>	Included in the revised Standard is additional guidance on the format of the report and what sections (e.g., Executive Summary) should be included in a Phase I ESA. In addition, the -21 Standard provides clarity on the consistent use of terminology (e.g., Subject Property) and further directs which items should be included within the Findings and Opinions Section of the report.	LaBella has adopted the revised Standard's suggested report format and incorporated the suggested terminology and guidance on report Findings and Opinions. While the format is a departure from previous LaBella Phase I ESAs, the changes to report format ensure that the User obtains a final deliverable consistent with the Standard and includes sufficient justification and reasoning to support the EP's overall opinion.
<b>Lien Search</b>	The -13 standard requires the User to have an environmental lien search conducted as part of the requirements for 40 CFR 312; however, the method to conduct this search was not described in the -13 standard. The revised Standard provides the scope for the lien search and notes that land title records for documents recorded between 1980 and present day shall be reviewed.	The additional document research is expected to provide the User with a more complete look at liabilities associated with the Subject Property. The effort needed to locate and review records dating back to 1980 will likely increase the fees and turnaround time associated with this task. If the User has requested that the lien search be conducted as part of the Phase I ESA, it is anticipated that the Phase I ESA fee and turnaround time will be increased.