

Raising Your Standards

Approaches on how to track and stay-up to date with your laboratory's testing procedures.

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Posted: November 2020

At the end of your closing meeting, the room falls silent and the turning of pages echo in the conference room as you begin to scan your laboratory's preliminary report. Your assessor addresses sections covered in your assessment, beginning with General Apparatus. Mechanical sieving apparatus- satisfactory, Ovens- satisfactory, but under the status of Literature, the section is marked as "See Finding." The note of the nonconformance is followed by: "The current versions of AASHTO Standards T330 (2015), T362 (2017), and T358 (2017) were not presented. Previous versions of these standards were presented." You have experienced an AASHTO assessment many times before, consider yourself a vet, but realize this isn't the first time your laboratory has received a nonconformity for out-of-date standards. At this moment you quickly identify that this may be a systematic issue.



Why Should My Laboratory Track Standards?

Standards are developed to help establish uniformity and consistency in testing. For the construction materials industry continual improvement is the goal amongst the most common standards development organizations, including American Association of State Highway and Transportation Officials (AASHTO) and ASTM International. Standard development organizations are constantly evolving their content simultaneously with ever-changing technology and advancements in transportation research. Before you have even had the chance to say "American Association of State Highway and Transportation Officials," a temperature increase or an extended sieving time may have been incorporated into a standard you use daily. As a result of the continuous standard development process, it can be challenging for laboratories to keep track of how and when a standard is updated. This oversight can lead to significant, unwanted outcomes. For example, a note listed as a literature or technical nonconformity in your laboratory's report, due to not utilizing the most current standards, may trace back to invalid results on a test report provided to a client. As a result, your laboratory could be tasked with contacting project managers, retracting results and determining their impact, and if asked, depending on the project status, to provide new results.

How Should My Laboratory Track Standards?

Now the question remains- *how* to mitigate this systematic issue? One course of action is to create a standards tracking system for your laboratory. There is no *one* right way, but creativity and flexibility are highly encouraged when determining a system to track methods. In the meantime, to save yourself a little hassle, AASHTO re:source uncovered a few resources to help you stay up-to-date and organized with AASHTO, ASTM, and state standards.

If your laboratory personnel are avid ASTM standard users, the ASTM's Standards Tracker® tool is one you want on your radar. ASTM updates their standards periodically and this service alerts customers twice a week, via email, of any newly published or revised standards. You have the liberty to choose the standard content you receive and the volume in which you receive it, by technical field, committee, or standard. For example, a laboratory's scope that maintains accreditation for three aggregate tests may opt to receive updates pertaining to the standard, a la carte, selecting "By ASTM Standard." In addition to receiving information on new and revised standards, if you or other staff personnel have an interest in standard development activities, this tool provides that opportunity.

For those laboratories working with AASHTO standards, signing up for the [AASHTO Publication Newsletter](#) serves as a route of communication allowing for your laboratory to receive periodic email updates about standards in April, June, and July. The newsletter content includes, but is not limited to, standard updates, notifications on price specials, access to archived standards, and information on purchasing standards. Content of the emails may not always specifically pertain to the publications or standards that apply to your laboratory, but fear not. AASHTO's social media pages: [Facebook](#), [Twitter](#), [LinkedIn](#) and AASHTO re:source's [Twitter](#) and [LinkedIn](#) provide information about standard releases and updates specifically pertaining to our construction materials customer base.

Another option is to create your own spreadsheet or table. This highly customizable method proves especially helpful for those laboratories utilizing state standards or those who may purchase standards through third-party vendors without tracking tools. For state standards, periodically checking your state's Department of Transportation website is key, and, if applicable, keeping an eye out for email communication the state's point-of contact-sends. By using a computer or using pen and paper to draw a table, you can create your own unique list of the standards utilized by your laboratory. It may help to set aside a designated date and time, like during an internal audit, to review your laboratory's standards. This can allow a laboratory-wide discussion and effective communication on the standards selected for use. As you begin the review, you may want to discuss or note the standards currently used or may be used for future projects. It may also help to include other information on the spreadsheet such as: standard designation, current standard possessed by the laboratory, and the most current version available of that standard. At the conclusion of creating the spreadsheet, your laboratory should have a clearer idea as to which standards are needed and the ones that can be taken out of service- assisting in organization and management.

Communicating New Versions of Standards for Effective Implementation

Since being made aware of ways in which to track standards, your laboratory has finally decided on a system that is simple and will not cause a disturbance in workflow. The next step is to ensure its effectiveness, which is communicating and establishing practices for consistent use of up-to-date standards by laboratory staff. First, evaluate the current line of communication. For technicians using standards daily, do they receive notice of an update from another staff member or does the responsibility fall into the technician's lap? Individual(s) specifically tasked with keeping a watchful eye on standards should determine how to communicate that an update has been made. This could include announcing that there have been standard changes at weekly or monthly staff meeting, sending an email with a list of standards that have undergone changes, at the appropriate time intervals, or even forwarding an email update from AASHTO or ASTM announcing that changes have been made. After combing through communication, it may also be helpful to evaluate *how* standards are accessed. If laboratory staff have their own personal computers or share a computer in a common space, downloading and saving standards to the desktop to repeatedly access them can be ineffective, possibly leading to the use of an outdated standard during testing. Instead, consider having staff members directly access the portals in which the standards were purchased each time the standard is used.

Lastly, it is important to follow up and evaluate the tracking system chosen by your laboratory. Receiving feedback from staff allows the opportunity to discuss improvements and if need be, choose another tracking system that may be more effective and suit your laboratory's needs.

Importance of Archived Standards

After selecting standards to take out of service, though not currently in use, having access to them can prove beneficial from a reference standpoint. You may need to reference previous versions of a standard in case of a report recall or if you are called upon to provide additional information on a completed project. The ability to pinpoint the version of the standard used at the time of testing saves time and a headache. Archiving standards also can help keep your data organized, and if necessary, easily accessible for auditing and retrievable for legal reasons.

“Phishing” Out Emails

As a laboratory, you are undoubtedly receiving a slew of email from colleagues and customers. To help keep the emails from ASTM, AASHTO, and your state in array, utilize your email provider's filter tools. Each provider has their own unique capabilities, but ultimately allows users to filter emails received by keywords and subject. Some providers even go as far as allowing you to create your own filtering “rule”. To find out more information on tools your provider offers, consult their “help” section.

Whether your laboratory's scope consists of three tests or 33, tracking and archiving standards keeps you aligned with uniformity and consistency. When selecting a tracking system most suitable for your laboratory, ensure that it is a process that personnel are comfortable with incorporating, effective, understandable, and does not pose to be a major inconvenience. Not only can you utilize tracking tools on the computer to stay up to date with standards, but also by consulting members of the construction materials industry, like a neighboring laboratory in your area and participating in conferences such as [AASHTO re:source's annual Technical Exchange](#). To achieve a functioning system, communication is essential which includes being aware of the content changes and ensuring that they are being placed into service and employed at your laboratory. Who knows, this may even be a key to saving you a page or two in your report.

Your Options for Keeping Up with Standards

ASTM's Standards Tracker® tool

- alerts customers twice a week
- choose content and volume
- updates in regards to the technical field, committee, or standard

AASHTO Publication Newsletter

- periodic email updates about AASHTO publications
- details on how to subscribe to the standards

Laboratory Derived Spreadsheet

- helpful for those laboratories utilizing state standards
- allows you to create a unique list of the AASHTO, ASTM, and state standards