

Laboratory Assessor Training Program

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While I have many responsibilities as a program manager for AASHTO re:source, one of the duties that I take most seriously is my role in managing the training program for our laboratory assessors. Not only are we obligated to our staff to provide them with the tools and skills they need to succeed at their job, but we also are obligated to you, our customers, to provide you with the best assessment services we can possibly offer. This article is intended to provide a brief overview of our laboratory assessor training program and the methods we use to ensure the highest levels of competency in our assessment staff.

This story really starts with our hiring and selection process. We pour through hundreds of resumes each year to select the candidates that we will interview for the position. We look for individuals with a technical background, excellent communication and interpersonal skills, and a desire to travel extensively. It may be difficult for our customers to have their laboratory operations scrutinized by our assessment staff, so it is our goal to make the process as smooth and beneficial as possible. In many cases, our assessment staff are the only face-to-face interaction that our customers have with AASHTO re:source. Therefore, we take the communication and interpersonal skills of a potential candidate just as seriously as we do the technical skills. Careful selection of the right candidates, who will do an excellent job of providing the high-quality service you have come to know and expect from AASHTO re:source, is crucial to the success of the Laboratory Assessment Program.

Each new laboratory assessor, regardless of previous work experience, is put through a rigorous training process that lasts approximately 6 months. The purpose of the program is to ensure that we provide services that are performed consistently and professionally to provide laboratories with assessments of the highest quality possible. The program covers AASHTO re:source's audit process for quality management systems (such as AASHTO R 18), as well as laboratory testing for each of the materials types that our assessment covers. There are 5 primary components of the assessor training program, as follows:

Literature Review:

Trainees are required to review all AASHTO, ASTM, and applicable state standards that are offered through the Laboratory Assessment Program (LAP) as a documented part of training. We believe that our staff must obtain a



certain level of familiarity with any standard for which they will be evaluating others against. Trainees are asked not to focus on memorization of the reading material, but rather to gain a general understanding of the standard including its purpose, required apparatus, and the test procedure itself. In addition to standards, articles, papers, and other reading material must also be reviewed and are assigned throughout the training period. The literature review is generally done in conjunction with in-house training. Once the initial review is complete, trainees are expected to review and re-review the required literature throughout the training process, as needed.

In-House Training:

In-house training is comprehensive and occurs throughout the training period. It includes a basic introduction to the construction materials testing industry, AASHTO's goals and vision, AASHTO re:source policies and procedures, and an introduction to the LAP. The majority of time during in-house training is spent observing and learning test procedures in the AASHTO re:source's laboratories. Classroom activities also take place to cover important testing theories, material properties, and other important topics. The in-house training also includes a two-day long course on AASHTO R 18, which is conducted by our Quality Manager, Tracy Barnhart. An emphasis is placed on developing good auditing skills and technique throughout the in-house training period. For each day of in-house training, there is a list of scheduled activities that must be covered. These training activities are documented, and feedback is provided formally to the trainees on their comprehension, professionalism, and other critical categories throughout the training period.

The in-house training is broken into units and quizzes are given after completion of each unit. These quizzes are used as a tool to ensure that certain important concepts have been covered and are understood. They include questions regarding testing theory, common procedural errors, calculations, terminology, and evaluation of testing equipment. Quiz results are reviewed and trainees are required to retake quizzes until satisfactory comprehension of the material has been achieved. This portion of the assessor training process typically takes approximately 10 weeks.

Proficiency Sample Testing:

AASHTO re:source proficiency sample testing must be completed by trainees to demonstrate that they have an adequate understanding of the test. Yep, these are the same samples that AASHTO accredited laboratories are required to run! This allows the trainee to intimately learn the test procedures and laboratory process through hands-on experience. Trainees may be required to repeat any testing if errors were made or poor ratings were received. This portion of training is expected to be completed by the trainees on their own in conjunction with in-house training, generally immediately after a test procedure has been demonstrated for them.

Field Training:

Trainees are expected to complete at least four assessment trips (approximately 8 weeks) with experienced members of assessment staff in order to fulfill their field training requirements. They are provided with clear expectations for their role during the assessment process, and are expected to take on a progressively greater role in each assessment. For each week spent in the field, trainees receive a formally-documented critique regarding their performance in several key areas of the assessment process. At the end of field training, a designated supervisor will shadow the trainee in the field to determine if they are ready to complete assessments independently.

**Competency Evaluation:**

A competency evaluation is the final step in the training process and takes place at the end of field and in-house training. The evaluation consists of a comprehensive laboratory practical and written test that is proctored by LAP supervisory staff. Trainees must receive a passing score on the competency evaluation before training is considered complete. It typically takes 2-3 days to complete the competency evaluation.

How are we doing?

Feedback from our customers has been key in implementing changes and continual improvements to our training program. What do you think of our assessment staff? Please let us know if there are any ways that we can improve our assessment services by [submitting feedback](#) or by sending an email to our Quality Manager, [Tracy Barnhart](#).

Editor's Note: This article was updated in June 2016 to ensure the more accurate information is presented.