

AASHTO re:source and CCRL: Two Organizations, One Mission

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The AASHTO re:source and the Cement and Concrete Reference Laboratory ([CCRL](#)). At first glance their relationship can be difficult to understand. To be fair, it's pretty complicated.

Let's start by exploring how CCRL began. In 1929 the Portland Cement Association (PCA), National Bureau of Standards (NBS) (currently NIST), and the American Society for Testing Materials (now known as [ASTM International](#)) co-created the Cement Reference Laboratory (CRL). Eventually CRL expanded its scope to include concrete, changing its name to the Cement and Concrete Reference Laboratory (CCRL). The mission of CCRL was to improve the quality of the construction materials industry with a third-party audit. As a result of these third-party audits, the benchmark for quality in construction materials testing greatly increased. However, the increase in quality was limited to the cement and concrete markets. There was growing demand for oversight in more construction materials testing fields...

In 1965, the American Association of State Highway Officials (now known as [AASHTO](#)) made it their responsibility to found an organization that would do for bituminous materials what CCRL was doing for concrete and cement. The AMRL was created, and as a department of AASHTO has both government and industry ties. Already the head of CCRL, J. R. Dize was tasked to lead the newly formed AASHTO Materials Reference Laboratory (AMRL). In 2016, changed its name to AASHTO re:source to more accurately reflect their programs and services. Jointly, CCRL and AASHTO re:source are known as the Construction Materials Reference Laboratories (CMRL).

Neither CCRL nor AMRL are technically "laboratories." The term was included in the names to fit within the existing NBS (NIST) department structure.

Because AASHTO re:source and CCRL have similar missions and functions, their original offices were in the same building on the NIST campus. This close proximity allowed for a flow of communication, and resulted in collaboration between the two. Laboratories have benefited greatly from this collaboration, and the quality of construction materials testing has seen great improvements due to the combined efforts of these organizations. However, the relationship with NIST was not very well-defined, and being located at the NIST campus added operational challenges for both AASHTO re:source and CCRL. In 2011 both organizations moved from the NIST campus to their current location in Frederick, Maryland.

Our Programs

There are three distinct programs within the two organizations. The first is the Proficiency Sample Program ([AASHTO re:source PSP](#) and [CCRL PSP](#)). Both organizations produce and distribute samples of construction materials for laboratory testing. Testing laboratories can evaluate their testing capabilities by comparing their test results to a large body of results. The quality of test results can be clearly demonstrated, thereby reducing the risk of disputes due to testing errors. The program also provides laboratories with the means to check both the testing apparatus and the operator under actual testing conditions.

AMRL on-site assessments were originally referred to as inspections. The term "assessment" is a better fit for these evaluation activities.

The second program is the Laboratory Assessment Program ([LAP](#)) for AASHTO re:source, or the Laboratory Inspection Program ([LIP](#)) for CCRL. During an assessment or inspection, a laboratory is evaluated for conformance to quality system requirements, as well as technical competence to perform laboratory testing.

Finally, laboratories can [obtain accreditation](#) through the AASHTO Accreditation Program ([AAP](#)). This program was developed in 1988 as formal recognition of the competency in testing laboratories. AASHTO re:source provides administrative coordination and technical support for the AAP, and CCRL and AASHTO re:source assessment and proficiency sample programs are used by the AAP to monitor the competency of the laboratories in its program.

Numerous organizations require testing laboratories to be AASHTO accredited in order to work on their projects. These groups are known as [specifiers](#).

Clearing Up the Confusion

Although AASHTO re:source and CCRL are two distinct organizations, some of our customers and services overlap, creating confusion. Most of this overlap surrounds the AASHTO Accreditation Program. A laboratory

seeking accreditation for test methods covered in CCRL program's scope will be sent CCRL proficiency samples and have CCRL staff conduct an assessment. Any nonconformities, findings, or other issues found in the ratings or assessment report will then need to be resolved through AASHTO re:source staff in the AAP. Although the transfer of information from CCRL to AASHTO re:source in this process can be confusing for laboratories new to our programs, staff within each organization strive to ensure a smooth interaction throughout the entire assessment and accreditation process.

Another aspect that may cause confusion is that both organizations offer laboratory assessment for aggregate test methods. Aggregate is included in the scope of both AASHTO re:source and CCRL because both concrete and asphalt mixtures include aggregate and therefore require testing of this material. Many labs in the AAP are accredited for both concrete and asphalt tests, and therefore have an assessment through both organizations; however, they only need one of the assessments to include aggregate testing. Laboratories that are seeking accreditation only for aggregate testing may receive an assessment through either organization in order to obtain AASHTO accreditation.

Finally, the aspect that causes the most confusion is that AASHTO re:source and CCRL may have different rules, guidelines, or policies. Since we have similar services, are located in the same building, and have a close partnership, customers can be confused why our policies and guidelines are not the same. It is important to remember that AASHTO re:source and CCRL are run by different parent organizations. Although we work closely to minimize any negative effects this may have on our customers, these two organizations do operate independently of each other.

The AASHTO re:source and CCRL will always have similar missions: to improve the quality of construction materials testing. If both remain in close contact, they can collectively share in the burden of that task. Through working together, both AASHTO re:source and CCRL can continue to improve the quality of testing in the construction materials industry.

Editor's Note: This article was updated in June 2016 to ensure the most up-to-date information is presented.