



South Carolina  
Department of Transportation



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**Federal Highway  
Administration**

## **SUMMARY REPORT**

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South Carolina  
Department of Transportation  
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# **Development of a Quality Program for Aggregates in South Carolina**

## **Summary of the Process**

At the start of the project, requests were mailed to state highway agencies (SHAs) for copies of their aggregate quality policies to learn more about the state of the industry. While the responses were being received and summarized, the members of the QC Committee were chosen by the SCDOT. The QC Committee included members from the industry as well as SCDOT and FHWA representatives. When all of the specifications had been received and summarized, they were presented at a meeting of the QC Committee.

At the first meeting of the QC Committee the members gave their expectations for what the aggregate quality policy was meant to accomplish. This helped to focus the committee and provide direction regarding how to proceed. The committee decided to place its primary emphasis on the aggregate programs of neighboring states. Therefore, the QC Committee charged the researchers with interviewing representatives from NC, GA, and FL to determine as much as possible about their current aggregate quality policies and the procedures that they used to develop and implement these policies.

At the first meeting the committee also received an overview and update on the progress of the hot mix asphalt (HMA) quality assurance (QA) specification development process that was already underway. This information was useful to the QC Committee since there were obviously similarities between the two processes, and because it allowed “lessons learned” from the HMA QA project to be passed to the members of the QC Committee.

The SHA interviews were conducted between the first and second meetings of the QC Committee. Some good information about aggregate quality policies was obtained at these interviews, but the most useful things about them were the development and implementation “lessons learned” that were brought back to the QC Committee by the researchers. In this way, the interviews provided information that was unavailable from the written quality policies. Therefore, the interviews were invaluable in providing insights that the QC Committee could not have obtained from the written materials provided in response to the survey of SHAs.

Overall, the process moved relatively smoothly. One thing that might have made the development easier is if members of the QC Committee could have attended all of the interviews. This was done during the HMA QA specification development process and proved to be very useful. However, due to time constraints on the current aggregate quality policy project, it was not possible to schedule interviews around the schedules of so many different individuals. It was therefore decided that the researchers alone would conduct the interviews.

The process of going from the first draft quality policy to statewide implementation of the final aggregate quality policy was a long one, with many drafts required. However, this process proceeded much more smoothly than did the HMA QA specification development process that had previously been completed. One of the major reasons for this is that SCDOT personnel prepared the drafts of the aggregate quality policy. In the HMA QA specification project, the principal investigator was charged with writing the draft specifications. Having the SCDOT prepare the drafts for the aggregate QC policy avoided the situation where both the SCDOT and industry committee members were viewing the draft policies for the first time prior to discussing them at the committee meetings. The process was therefore less contentious than was the case for the HMA QA specification development.

## **Findings**

When the SCDOT began its first project to develop a new HMA QA specification, they may not have realized the magnitude of the change they were about to undertake. As they learned more about QA specifications they realized the complexity of the specification development process and they learned that QA is a continuing process. What was learned during the HMA QA specification process was applied to the aggregate quality policy development process. As a result, this process progressed much more rapidly and smoothly.

The SHA interviews were an important part of the process. They allowed the QC Committee to see how different aggregate quality policies work in neighboring states and to hear opinions from various contractors and state personnel about the advantages and disadvantages of different aggregate policies.

There were some aspects of the process that were particularly important to the success of this project. One of these was the involvement of aggregate producers and contractors in the development process. This is necessary to help the industry overcome the fear of change. If they have input into the policy and are familiar with it, they will be more inclined to work with it instead of against it.

Another significant success factor was the fact that SCDOT personnel, rather than the principal investigator, took responsibility for preparing the draft quality policies. This allowed the SCDOT to collectively “buy-in” to the policy and to claim ownership of the aggregate quality policy at an earlier stage in the development process than would have been possible if the principal investigator had developed the draft policies.

## **Recommendation**

Any specification or quality policy must be an evolutionary process. Since new information is constantly becoming available in the form of additional test results, and as new construction or testing processes are employed, the policy requirements must be continually monitored to see if modifications are needed. This first aggregate quality policy, in particular, will need to be monitored in its early years. This is true because actual test results from quarries need to be evaluated to determine if the initial requirements are appropriate. Other procedural modifications may also be identified as a result of the widespread use of the new policy. It is important that the SCDOT provide or make arrangements for this monitoring effort.

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