

Title: 2010 SCoPM Performance Excellence Award Application

Team Name	Environmental Programs Division Quality Assurance Team
Date Team Operating from	2007 to Present
Organization Name	Maryland State Highway Administration
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Team Purpose: The Quality Assurance Team (QA) works with the Maryland State Highway Administration's (SHA) construction staff and private construction contractor partners to ensure compliance with Federal and State laws and regulations for erosion and sediment control on SHA construction projects. Specifically, the QA Team provides oversight to guarantee adherence to plans, specifications, permits and all authorizations granted to SHA by the Maryland Department of Environment (MDE) under a Memorandum of Understanding (MOU) for self-inspection. QA Team performance minimizes risk to SHA's Office of Construction for project delays, fines and penalties. Monitoring and continuously improving compliance for erosion and sediment control through business planning performance management supports SHA's commitment to the highest environmental standards and protection of Maryland's natural resources.

Impact of Team Improvements: The QA Team successfully implemented several important business process changes to increase efficiency in identifying and resolving erosion and sediment control non-compliance issues with MDE, and implemented training and certification programs to improve contractor and SHA construction staff performance in meeting regulatory requirements. As a result, SHA achieved 99.70% compliance in FY 2009 and FY 2010 toward its 5-year business planning cycle goal of 100% compliance. The frequency and magnitude of non-compliance findings has steadily decreased, despite an increase in the number of inspections being performed. This achievement was accomplished without increasing staffing or funding levels. Importantly, relationships with agency partners and the private sector contractor community have been improved through increased program transparency and accountability.

Category 1 – Customer Focus (275 Points):

1.1 List the key customers of the team

1.1a Maryland Department of Environment (MDE)

1.1b SHA Administrator and Senior Management Staff

1.1c SHA Construction Staff and Private Sector Contractors

1.2 Explain why you determined these were the key customers

1.2a Maryland Department of the Environment has enforcement authority for compliance with state regulations and has delegated inspection authority with oversight to SHA.

1.2b SHA Administrator and Senior Management Staff monitor QA Team performance through the SHA Business Plan and provide direction for continuous performance improvement.

1.2c SHA Construction Staff and Construction Contractors as a combined team inspect, manage and complete construction projects. They have primary responsibility for compliance with environmental regulations and standards during SHA construction activities.

1.3 Explain how the team listened to and collected information from the key customers

1.3a Coordination meetings at concurrence points in the compliance process provided opportunity for discussion on improving and strengthening compliance performance. Customer expectations for increased efficiency in identifying and resolving compliance issues were communicated in the context of the existing MOU.

1.3b Input from the SHA Administrator and Senior Management Staff was received in quarterly performance reviews that directed the QA Team to make improvements that would allow 100% compliance for Erosion and Sediment Control on all SHA construction projects.

1.3c Numerous meetings were conducted with the Office of Construction and the Contractor Association during which input was received on challenges in meeting 100% compliance goals, and the need for consistently applied performance criteria. Stakeholder buy in for proposed solutions with respect to business process improvements and training programs was obtained.

1.4 Explain how the team turned information collected from the customers into requirements

1.4a In order to more efficiently and effectively identify, report and resolve non-compliance findings, the QA team developed an internal checklist to capture MDE regulations, standards and permit obligations for use in evaluating SHA projects. The information collected is used to report back to MDE as required by the MOU.

1.4b A goal of 100% compliance for erosion and sediment control was formally established in the SHA Business Plan. Performance reports including challenges and strategies for improvement are presented quarterly and direction is received from the SHA Administrator and Senior Management Staff for program adjustments resulting in continuous performance improvement.

1.4c Training and certification programs ensure that SHA Construction Staff and the Contractor community understand requirements to maintain complying status and apply appropriate methods and technologies.

1.5 Explain how the team determined both customer satisfaction and dissatisfaction

1.5a SHA is obligated to report to MDE on a routine basis regarding all compliance/non-compliance ratings. The QA Team members meet with MDE representatives routinely and receive positive feedback regarding review consistency. Any non-compliant issues require and receive immediate information and concurrence exchanges between SHA and MDE.

1.5b Achieving 100% compliance in keeping with the goal formally established and tracked in the SHA Business Plan will indicate satisfactory performance within the expectations of the SHA Administrator and Senior Management Staff. Less than 100% compliance every quarter requires continued analysis and program adjustments to address programmatic concerns.

1.5c The QA Team evaluates SHA projects on a routine (2 week) schedule and assigns a letter grade based on project conditions at the time of the review. Letter grades of A, B or C represent

compliance with the program and letter grades of D or F represent non-compliance. Reviews involve open dialogue with project representatives.

Category 2 – Process Management (275 points):

2.1 List the process(es) applicable to the team purpose and performance expectations

2.1a Improving the Quality Assurance inspection process through use of the checklist and points-based contractor performance ratings is key in meeting MDE's expectations for rigorous and complete evaluations to meet the intent of the MOU with MDE.

2.1b Applying better data collection tools and data integrity control procedures in the performance measurement process is critical in evaluating and continuously improving the Quality Assurance program to meet the SHA Business Plan goal of 100% compliance.

2.1c Increasing program awareness through training and outreach to keep contractors and inspection staffs current on the latest requirements is integral to improving compliance performance.

2.2 Describe the step taken to achieve the purpose of the team

2.2a The QA checklist and points-based contractor rating system were implemented to ensure inspections and resulting reports to MDE were complete and consistent, and contractors were objectively graded for performance. The number of Quality Assurance inspections on projects was increased. The QA team was reorganized under the leadership of a single team manager.

2.2b A web-based electronic database (known as the QAtoolkit) was created to collect data and link to the SHA Business Plan for timely data reporting. The QA Team was moved into the Office of Environmental Design to promote program integrity and efficiency.

2.2c An erosion and sediment control certification program and training was developed for internal and external customers with an emphasis on environmental stewardship as part of the construction process. Environmental guidelines for construction activities were developed and distributed to internal staff and construction contractors. An incentive-based program was implemented to promote improved contractor performance. A liquidated damages penalty was introduced for those projects found to be in non-compliance with the QA program and time limits placed on corrective action.

2.3 Explain how steps taken to achieve the purpose of the team affected efficiency, effectiveness, quality, and/or customer satisfaction attributes

2.3a Implementation of the points-based based grading system increased the quality and accuracy of the required reporting on the compliance status of each SHA project. The move to a single team manager allowed for the consolidation of resources and greater efficiency in the overall program, and enabled an increase in the number of inspections performed with the same number of field inspectors.

2.3b The QAtoolkit consolidated information into a single location and allowed the team to work independently with quick access to all available and necessary information. Inspection reporting is now completed in real-time with access to the reports by all management and system users.

The QAtoolkit also allows for direct reporting to the Business for ever increasing transparency

and accountability. The move of the team to the Office of Environmental Design facilitated a closer working relationship and communication with the environmental leadership of the organization.

2.3c The certification and training programs and guidance document have improved communication among stakeholders and provided a technical foundation for improved compliance and avoidance of environmental impacts, project delays and project cost overruns. Coupled with incentive payments, these steps have resulted in an increase in the overall average project grade statewide. With increased liquidated damages and accelerated specification time commitments for corrective action there has been an overall reduction in violations and time spent in a less desirable grade situation.

2.4 Explain how the team gathered data, analyzed it, and the tools used to make decisions

2.4a Inspection records from the QAtoolkit are queried and analyzed using representative graphs and charts on a monthly, quarterly and yearly basis for reporting to the SHA Business Plan and evaluating the need for program adjustments. Feedback is collected during training and outreach programs to improve customer satisfaction. A monthly meeting with the QA team is held in order to share information and streamline the team's statewide activities.

2.4b The tools utilized were Pareto Chart, cause and effect analysis, histogram and check sheets in the reporting and analysis process.

Category 3 – Results (450 points):

3.1 Provide current levels and trends for customer satisfaction and dissatisfaction

The QA Program continuously solicits and receives positive feedback from customers during formal Partnering Meetings, joint field reviews with MDE, and quarterly performance reviews with SHA Management Staff. Ultimately, customer satisfaction is measured by positive compliance program performance attributable to heightened environmental awareness by construction staff and contractors. Provided charts show an increase in the average grade of projects statewide and a decrease in the percentage of unsatisfactory C, D and F grades statewide.

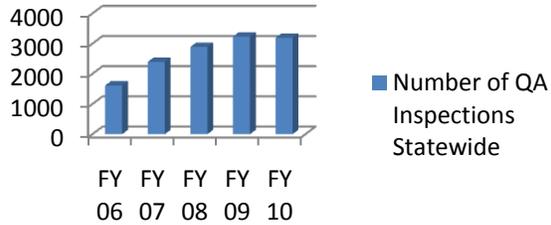
3.2 Provide current levels and trends in key measures or indicators for the process(es) listed in Category 2 above

The included charts demonstrate the effectiveness of changes to the Quality Assurance inspection process and training initiatives with higher average statewide compliance grades in FY 2009 and FY 2010 than in previous years. Performance measurement through the SHA business planning process will continue to drive process improvements.

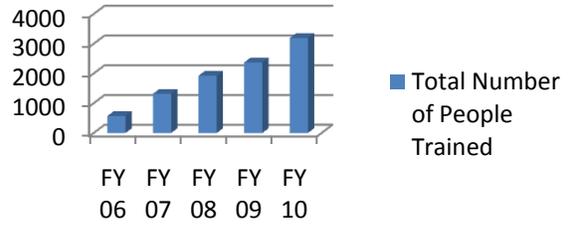
3.3 Provide current levels and trends in key measures or indicators of effectiveness, efficiency, and or quality

The consolidation of the team under a single manager and the move to the Office of Environmental Design resulted in an increase in team efficiency as depicted by the chart showing increase in the numbers of inspections performed annually. Inspections in FY 2010 increased 97.9% over FY 2006 levels without an increase in staffing or funding levels.

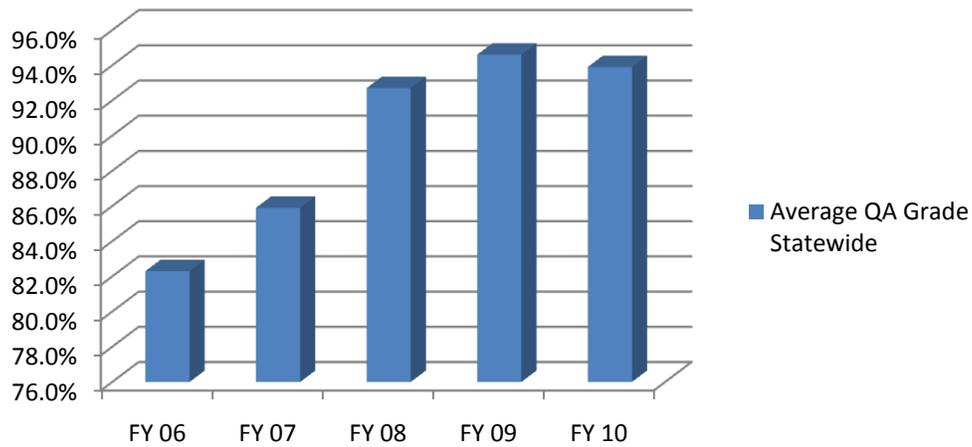
Number of QA Inspections Statewide



Total Number of People Trained



Average QA Grade Statewide



Percent of C,D,F Grades Statewide

