

Quality Assurance Environmental Compliance FAQ

The following is a series of Frequently asked Questions (FAQ) related to MDOT/SHA's Quality Assurance Program and the administration's environmental program related to construction projects. The following is meant to help individuals with understanding and also provide some basic guidance. Contact your Regional Environmental Coordinator (REC) for additional help or information related to the program and how it relates to construction projects.

General Questions

When can I remove E&S Controls, When the area is Stabilized or when Stabilization has occurred?

Generally, the question of stabilized vs stabilization come up related to removal of controls. When considering removal of controls one must refer to the specification and contract documents.

2008 specifications - 308.03.14 Removal of Controls. Do not remove erosion and sediment control measures until all previously disturbed areas are vegetated with at least a 3 in. growth of grass, and the removal has been approved by the Engineer and MDE. Backfill, grade, and stabilize the sediment controls.

2017 specifications - 308.03.43 Removal of Controls. Do not remove erosion and sediment control measures until all previously disturbed areas are vegetated with at least a 3 in. growth of grass, and the removal has been approved. Backfill, grade, and stabilize.

2018 specifications – 308.03.44 Removal of Controls. Do not remove ESC measures until all previously disturbed areas are vegetated with at least a 3-in. growth of grass, and removal of the ESC measures is approved by the REC and the Engineer. Immediately stabilize those areas where ESC measures are removed as specified and as directed.

What is the difference between Stabilized and Stabilization?

MDE has the following definitions as part of the 2011 Specifications:

Stabilized - to protect exposed soils from erosion by the application of seed and mulch, seed and matting, sod, other vegetative measures, and/or structural means.

Stable Area - An area sufficiently covered by erosion-resistant material, such as a good cover of grass or paving by asphalt, concrete, or stone, that erosion of the underlying soil does not occur.

Although MDE does not define **Stabilization**, throughout the 2011 Specifications "stabilization" is referred to as the establishment of vegetation through various means and methods and that permanent stabilization is required prior to removal of E&S controls.

SHA has the following definition as part of the 2008, 2017 and 2018 Specifications:

Stabilization Measures - Activities that provide vegetation or otherwise prevent erosion. These activities include the placement of temporary or permanent seeding or mulching, soil stabilization matting, riprap, stone aggregate, and asphalt or concrete paving.

Stabilization Measures - Activities that prevent erosion. These activities include the placement of temporary mulch, temporary seed, permanent seeding such as turfgrass establishment, soil stabilization matting, riprap, stone aggregate, and asphalt or concrete paving. The placement of one or more of these temporary or permanent stabilization measures to the satisfaction of the Engineer will meet the requirements for proceeding to the next grading unit or operation.

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When can we stop doing reports?

Depends on what report you are asking about.

NPDES – NPDES inspection reports are to be completed from the time of first ground disturbance until the project is completed and the Notice of termination has been accepted by MDE. Refer to the NPDES permit for guidance on reducing NPDES reporting.

ESCM Daily - The ESCM daily reports are to be completed from the time of first ground disturbance until the work is complete, permanent stabilization has been established and E&S controls are removed from the project. Always discuss any reduction or stopping of daily reporting with the REC.

How soon should I see grass grow?

Many Factors are involved with seeing vegetation begin to germinate and grow. The most important factors are installation and then the weather. In regard to installation soil preparation is the most important factor (proper amendments and topsoil placement). Refer to the specifications and SHA Yellow Card Training for more information about proper vegetation establishment. In regards to the weather the following factors have an effect on seed germination

Soil Temperature – suitable soil temperature for grass seed is around 55 degrees

Rainfall – as with all seeds, your grass seed will need sufficient rainfall to germinate and grow well. The ideal time for this in Maryland is early spring and early Fall.

After an area is stabilized, you should see new sprouts no later than two weeks afterwards. In some circumstances, you may see them in only a few days.

Why are you bringing that up, that is not an E&S issue?

The primary focus of the QA Program is Erosion and Sediment control along with Storm Water Management. Compliance with environmental regulations and permits does not stop with just E&S/SWM, there are several other environmental permits that may be a part of a construction project and MDOT/SHA has a responsibility to ensure compliance to all of them during the progression of work. The QA Program will consider all of the other environmental issues during a routine inspection to ensure compliance to all environmental rules and regulations. A part of the QA inspection includes questions related to having all necessary permits and also remaining in conformance with the contract documents (permits inclusive).

There may also be instances when comments or concerns are noted about an item that is not an apparent environmental issue, in those instances it has been recognized that the concern could lead to an environmental issue.

Why can't I give excavated material to anyone who asks since it is just waste anyway?

In the Specifications TC 6.11 states: All wood, trash, debris, and other foreign matter shall be removed from within the right-of-way limits and disposed of by the Contractor. The Contractor shall make all necessary arrangements to obtain suitable disposal locations and shall furnish the Engineer with a copy of resulting agreements. Disposal shall be in conformance with all Federal, State, and local ordinances.

The waste material that is removed from a project is technically the property of the State of Maryland. The contractor is compensated to dispose of it properly at approved sites in order to ensure no regulations or local ordinances are violated.

Why do I need to contact other divisions? I thought the District ran the project.

While the MDOT/SHA District does administer the project to ensure everything is built per the plans and contract documents, other division within the administration can provide support and/or oversight when required. Some examples include:

- The Quality Assurance Division has the responsibility to provide environmental oversight (permit compliance reviews).
- The Landscape Programs Division can provide expertise in vegetation and plantings.
- The Environmental Programs Division can provide expertise when working in or around waterways/wetlands.

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How am I supposed to build this? I cannot believe someone designed it this way. How do you think I should go about doing this? Do you really want this installed?? Is there any way we could change this?

That's a lot of questions and concern but we do hear this or something very similar in the field. Let's tackle this one part at a time.

How you are supposed to build this is a matter of means and methods. When a contractor signs a contract to construct an Administration project it is understood that they are agreeing to build the project per the plan, how they go about building it is their decision as long as they are able to meet the specifications and contract documents.

Someone did design it that way. Keep in mind that designers may have a different thought process from you when designing a project. Sometimes there is more than one way to do something and each method has its benefits and drawbacks. A progress meeting would be a good forum to discuss the design intent with the designer.

How you go about doing it is your call as long as you adhere to the contract documents. Means and methods are the contractors responsibility.

YES, I really want it installed. Professional Engineers have taken the time to evaluate the best methods of E&S controls. Do not say it is not going to work until it has been installed correctly. If after proper installation and maintenance, we find there is an issue or concern it can be adjusted as needed.

YES, there are ways to change the plans. Refer to the question related to modifications for more information.

Why is Stormwater Management such a big deal to MDOT SHA?

The Stormwater Management Act of 2007 requires that the Code of Maryland Regulations (COMAR) be modified and guidance and ordinances be developed for the purpose of implementing environmental site design (ESD) to the maximum extent practicable (MEP) on all development projects. The Act defines ESD as “using small-scale stormwater management practices, nonstructural techniques, and better site planning to mimic natural hydrologic runoff characteristics and minimize the impact of land development on water resources.”

What type of permit do I need and how would I know that?

Permits and approvals are included in the IFB. These documents include:

- Conditions of the approval or permit.
- TOY restrictions.
- Need for submitting Certification back to EPD at end of projects/before project closeout/acceptance for maintenance (part of sketchbook requirement?)
- Effective dates and expiration dates.

All project will have either permits associated with them or an exemption. If the project is exempt from needing a permit a letter stating that will be provided. There is no such thing as a project with nothing related to environmental permits. It either has a permit(s) or an exemption letter.

[illegible]

For additional information about the different types of permits refer to the “Environmental Permit Description and Example Guide”

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What is an exemption letter? If I have little to no disturbance I thought a permit is not needed.

ALL MDOT/SHA project must be reviewed by the Plan Review Division (PRD).

PRD will determine if the issuance of a SWM/ESC approval is necessary or if an exemption may be issued. Generally, an exemption is granted when disturbance is less than 5000 sf AND there is less than 100 cy of excavation. This exemption is only from the formal review and approval process. Effective erosion and sediment controls must still be provided during construction.

Just because a project is exempt from ESC doesn't mean it shouldn't be reviewed by HHD. Since HHD reviews applicable QA Toolkit mods, it is best to keep them in the loop in the design phase, too.

PRD is required to report exemptions to MDE as part of MDOT SHA's delegated authority. Without a PRD-issued exemption, your project may be working at risk. The QA Program checks to ensure that projects under construction have either an exemption or SWM/ESC approval. Without either, your project may be shut down.

Quality Assurance Toolkit

How do I get to the QA Toolkit?

To access the QA Toolkit, enter www.oedtoolkits.net into a web browser. This portal provides links to the Office of Environmental Designs Toolkits. Click on the QA Toolkit button to go to the login page.

How do I get a new 'log in ' and 'password'?

All individuals who need to use the QA Toolkit and do not have an account should select the "Request Account" button on the QA Toolkit login page and complete the required information on the "New User Account Request Page". This system should only be utilized for requesting new accounts. When the account is setup you will receive a notification email with your new login information.

May I add new projects to my Toolkit account?

Users may request access to additional projects from their toolkit account under the Settings Tab. Select the project in the provided dropdown menu and then click the associated "update" button, after a review of the request a system administrator will approve or deny the request.

What are all of these notification's I get from the toolkits?

The QA Toolkit and the automatic email system provides users with a method to stay informed with the status of the project. A Toolkit user can subscribe to receive the notifications options listed below.

- Inspection Ratings (A, B, C, D, F, or No Grade)
- Site Conditions (Compliance, Needs Corrections, or Non-Compliance)
- Permit issuance and expiration
- All modification requests and associated responses or
- All modification request approvals only
- Yellow Card certification expiration
- Project Communication
- Storm Water Management AS-Built review and approval

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Modifications

What is the difference between a modification and a QA Concurrence?

There are several ways to change contract documents and plans, it is important to understand the difference. The following is a summary of the different types of plan changes and the conditions that they should apply.

Addendums: Whenever a change occurs to the design document package after advertisement and prior to Bid Opening, the administration will issue an addendum. The addendum is an official notice prepared by the PE to all affected contractors and other affected parties describing in detail the change to the contract. This contract change may include adding, deleting and revising plans (including pen & ink), Special Provisions and Engineer's Estimate, responses to contractor questions (including clarifying contractors' issues) and postponement or cancellation of the bid opening.

Red Line Revisions: The purpose of a Red Line Revision is to provide revised contract plans documenting changes that are necessary to complete construction. Changes, quantity overruns, errors and omissions that can be constructed without requiring changes to the contract plans will not require a Red Line Revision. The types of changes requiring a Red Line Revision may include, but are not limited to, the following:

- Revisions to correct errors and omissions that require plan adjustment necessary for the contractor to complete the work.
- Scope changes that add, delete, or change contract plans and require revision of the contract plans for the contractor to complete the work
- Revisions to address unforeseen field conditions that require plan revisions necessary for the contractor to complete the work.

The approval process for Red Line Revisions will be the responsibility of the Lead Design Division or District Office for district projects. Approval will also be required from the SHA office managing the specific program funds.

Green Line Revision: The purpose of a Green Line Revision is to document as built construction that differs from the contract plans. The Green Line Revisions will be generated from plans marked up by the construction engineer accurately documenting permanent features such as structure invert elevations, pipe type and sizes, location variations, utility locations/relocation, etc. For Design/Build projects the Contractor is required to forward final as built plans to the Lead Division. All projects require final as-built plans to the Lead Division.

Modification: A modification is a change to the plan in the field (blue line markup) generally related to temporary E&S control items.. This will require review and approval at differing levels based on the complexity of the request. Modifications are meant to address field level adjustments to temporary items in the plans and not for large scale changes or issues impacting Scope of Work. Examples include:

- Adding E&S Controls
- Adjusting the Limits of Disturbance
- Create a Stockpile
- Modifying an E&S Control
- Changing the Sequence of Construction
- Create a Staging Area
- Substituting an E&S Control
- Work during a Stream Restriction Period
- Change Vegetation Standard

QA Concurrence: A QA Concurrence is when a change is not made although per the plans or program guidance the REC must concur with what the contractor is doing. Examples include:

- Moving an SCE to a better location
- Moving a dewatering device to a better location
- Move to the next phase of work
- Convert a Storm Water Management Facility
- Remove controls with adequate growth
- Delay of control installation when area of control is not yet disturbed

How is a modification done?

Field Modifications on active construction projects are to be submitted through the QA Toolkit for review by the appropriate Office/Agencies. QA Package reviewer (Authorized members of the QA team) will conduct a cursory review of a request package to ensure it includes all the needed parts such as signature or plan markups. When the request package is submitted for review you will be alerted through the automatic email system. This system is not to be utilized for Red-Line revisions or Design Submittals on Design Build Projects.

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I have a Yellow Card; why can't I make changes in the field without doing a modification?

The Yellow Card Certification is not a designer's certification. The training is designed so that responsible individuals on MDOT/SHA construction project understand their responsibilities and the administration's environmental program. This training also helps those individuals recognize when to involve other parties when issues arise. Specifications, Plans and Contract documents are a part of the construction process to ensure projects are constructed in accordance with all rules and regulations at a state and federal level. Although making changes in the field without proper review and approval may seem reasonable to some, without proper knowledge of E&S Control methodologies, design intent and functionality of any particular E&S control changing the design may have unintended negative consequences.

The Maryland Department of the Environment has granted Delegated Authority to MDOT/SHA so the administration may be more attentive to contractors when a modification is requested. Delegated Authority dictates that only specific individuals may approve modifications to the plans at their outlined level.

Why do I need the REC's concurrence for minor issues?

Try not to think of a QA Concurrence as having to ask for approval but rather as seeking a second opinion. REC's are trained to understand the environmental impacts and consider the ramifications to making these types of decisions in the field. The REC should be viewed as a second set of eyes in the decision-making process of the Project Engineer. If the Project Engineer does not already agree with the request, then the REC will not even consider it.

When removing E&S controls, when is a QA Concurrence necessary and when is it not?

There are two differing scenarios for removal of E&S Controls:

1. **The plans give direction for removing the control in the sequence of construction or some other note.** If the plans are directing the removal of the control as a part of the normal course of work then a QA Concurrence is not required.
2. **The plans do not give direction for removing the control or state that QA Concurrence is required.** If there is no directing given about when to remove the control or the plans actually require QA concurrence, then a concurrence must be submitted and approved.

How is a QA Concurrence done?

QA concurrences on active construction projects are to be submitted through the QA Toolkit for review by the REC. When the request is submitted for review you will be alerted through the automatic email system.

Who will the modification request I submit go to for review?

When a modification is submitted to the QA Toolkit it is first reviewed by the SHA Project Engineer. Upon the Project Engineer's review and concurrence with the request, the modification is then reviewed by the QA program package reviewer. Once the QA program package reviewer has reviewed for completeness the modification it is then sent to the appropriate division within SHA for review. Multiple Divisions or Agencies may be necessary such as QAD, HHD, EPD, LPD, MDE, or Army Corp of Engineers depending on the nature of the modification request.

Do all modifications have to be documented?

Yes. All modifications are to be documented through the QA Toolkit. Remember that a modification becomes the approved plan and therefore must be approved and documented through the approved methods and process.

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Quality Assurance Inspection Reports

I added a control as a best management practice, why am I losing points on the QA review?

Best Management Practices” is language often found in permits or the contract documents, it often includes a bullet list of how to best protect the environment during construction or maintenance activities. The intent of this information is to give a method of environmental protection that will be acceptable when there is no other guidance available. When there is no other plan or details then the Best Management Practices (BMP) should be followed.

When there is a plan or other details associated with the work to be conducted then those plans and details should be followed. **At no time should it be assumed that the BMPs override the approved plans**

How can I contest a grade I do not agree with?

Within 30 days of receiving a Quality Assurance Report with a non-compliance rating, contractors may submit, to the OED Director with a copy to the administering office/district, a written request for reconsideration of the non-compliance rating. Requests shall include new information that substantiates the dispute and justifies reconsideration of the assessed rating. After review, the OED Director will respond to the contractor, copying the administering office/district, providing a final, written determination on the non-compliance rating

I fixed the issue, why am I not getting credit for it on my report?

The QA inspection is a review of the project’s current site conditions, plans, permits, and contract documents. If an issue has been identified during the inspection, then it is documented at that time. Correcting an issue after it has been identified does not change the fact that the issue was identified as part of the inspection. If the issue was corrected during the inspection it may be documented in the comments section of the report that the issue was corrected and the timeliness of the correction will be reflected in the next routine inspection.

How is it partnering if the contractor receives a poor grade?

The best way to answer this question is to define both the customers and partners of the Quality Assurance Program.

The **Customers** of the Quality Assurance Program include the citizens of Maryland along with the regulatory agencies issuing the permits that allow MDOT/SHA to build and maintain the infrastructure for the state of Maryland. The services that this program provides to our customers is to ensure construction activities are conducted in compliance of all environmental permits and regulations

The Quality Assurance Program **Partners** with the contracting community to build and maintain Maryland’s highways system when possible so long as that partnering does not conflict with the service we are obligated to provide to our customers as defined above.

Are you shutting down my project today?

The QA Program does not shut down projects. If the QA inspection report indicates that the project is in non-compliance, per the specifications the Administration will shut down the project dependent upon the QA report rating. It is the responsibility of the Project Engineer to shut a project down based on the grade assessed and the guidance provided by the specifications.

Why does a project need an REC/QA and IEM if they do the same job?

The REC and the IEM are similar in nature but have different responsibilities. The REC is an independent Quality Assurance Inspector that conducts reviews of SHA Construction and Maintenance activities to ensure compliance with environmental regulations. The primary purpose of the REC is to provide an un-biased report of the current site conditions as they relate to the plans, permits, and contract documents.

The IEM is an independent Environmental Monitor acts as an on-site extension of the environmental agencies (MDE, COE) to help ensure that all permit conditions on a project are adhered to and met. The IEM acts as a liaison between field operations and the resource agencies, serving as their “eyes and ears.” The IEM’s main responsibility is to monitor construction relevant to environmental permit conditions directly impacting a resource.

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What are the leading causes of most non-compliances?

Non-compliances can occur for a number of reasons. The most common causes for a project non-compliance are failure to maintain the erosion and sediment controls in a timely manner (not correcting identified issues), failure to follow the approved sequence of construction and/or approved modifications, and disturbing areas outside of the project limits of disturbance, wetlands, buffers, and jurisdictional waters. In addition to the causes listed, lack of communication between the contractor, SHA staff, and REC can contribute to a non-compliant condition.

If I have no disturbance do I need a permit?

The answer is it depends. The project that does not have any disturbance does not need a Stormwater and Erosion Control permit but may need other agency permits depending on what impacts are identified in the approved plans. It is also important to remember that due to MDOT/SHA's Delegated Authority from MDE all project must be reviewed by the Plan Review Division (PRD). PRD will issue an E&S/SWM waiver when a project does not meet the permit thresholds.