



OFFICE MEMORANDUM

DATE: May 20, 2009

TO: Region Engineers
Region Delivery Engineers
TSC Managers
Resident/Project Engineers
Region Construction Engineers

FROM: Gregory C. Johnson
Chief Operations Officer

John C. Friend
Engineer of Delivery

SUBJECT: Bureau of Highway Instructional Memorandum 2009-05
Revisions to the 2006 Soil Erosion and Sedimentation Control Manual

The attached revision to MDOT's 2006 Soil Erosion and Sedimentation Control (SESC) Manual is a result of recent changes by the Michigan Department of Environmental Quality (MDEQ) to the soil erosion and sedimentation control (SESC) and storm water certification programs. MDEQ reviewed and approved this revision, as required to maintain MDOT's status as an authorized public agency. The 2005 Technical Skills Plan for the construction technician classifications is undergoing revision to reflect this change in certification requirements. This MDEQ certification change is effective **May 1, 2009**. Certifications under the old MDEQ programs are valid until one or the other expires.

In the past, MDEQ required that an individual complete a comprehensive two-day training course and pass an examination on the subject to be certified under the Part 91 SESC program. Individuals with responsibility for inspection of construction sites for compliance with the construction storm water runoff program had to complete additional training and maintain certification as a storm water operator under Part 31 National Pollution Discharge Elimination System (NPDES). The new certification program consists of a comprehensive SESC course and an SESC inspector course. The comprehensive SESC course retains all of the topics from the two-day training and adds some storm water concepts. The SESC inspector training combines the SESC and NPDES topics related to the inspection and documentation of soil erosion and storm water runoff conditions on a project. The result is a more focused certification approach whereby the information covered better matches an individual's SESC/NPDES program responsibilities.

MDOT identified specific positions, based on program responsibilities, across the department that will be required to obtain either the comprehensive or the inspector level of certification. Only those positions with direct responsibility for administering the SESC/NPDES program will be required to maintain comprehensive certification. Individuals with responsibility for

conducting and documenting site inspections will need only the inspector certification. On May 6, 2009, MDEQ approved revisions to Section 1.2 of the SESC Manual. These revisions reflect the new MDEQ certification requirements for individuals with responsibilities for SESC during the design, construction, and maintenance of the transportation system.

Regardless of the level, the MDEQ certifications are valid for five years. When an individual's certifications for either storm water or SESC come up for renewal, they should consult the SESC Manual and the Technical Skills Plan to determine the appropriate level of certification before arranging to complete the revised MDEQ coursework and take the required exam. At this time, MDEQ is not providing a classroom style course, offering instead a self-study course followed by a proctored exam that individuals must arrange to take at the MDEQ district offices. The Construction and Technology Division's (C&T) technical training staff will continue to coordinate the self-study and exams.

Questions regarding this SESC program change can be addressed to Judy Ruszkowski at 517-322-5698 or ruszkowskij@michigan.gov. Questions regarding the MDEQ examination schedules should be referred to Therese Beasley at beasleyt@michigan.gov or Terri LaVoy at lavoyt@michigan.gov in the C&T Region Services Unit. Refer to the attached MDEQ memo for additional details.

Chief Operations Officer

Engineer of Delivery

Attachments

BOHD:C/T:JR:kab

Index: Environment

cc:	C & T Division Staff	M. DeLong	B. Wieferrich
	J. Reincke	J. Culp	B. O'Brien
	P. Collins	C. Rademacher	P. Sebenick
	G. Moore	K. Reincke	D. Calabrese, FHWA
	ACEC	APAM	CRAM
	MAA	MCA	MCPA
	MITA	MML	R. Mikula, MDEQ

Revisions Effective date May 6, 2009

1.2.2 SESC (Part 91) Training – Individuals responsible for administering and enforcing Part 91 through MDOT's SESC program will complete the MDEQ-sponsored Comprehensive SESC examination. These individuals may prepare to take the examination through either a self-study course using materials available from the MDEQ or by completing a training program offered by MDEQ. Refer to section 1.2.4 for additional information on recertification.

The SESC Staff Engineer will work with TSCs and Region offices and the Construction & Technology Technical Training Coordinator to ensure all appropriate MDOT staff successfully complete SESC (Part 91) training as required by MDEQ.

Administering and enforcing the MDOT program consists of quality assurance oversight; preparation of standards and specifications related to SESC; and preparing and reviewing construction and maintenance project plans involving earth change activities.

At a minimum, SESC program administrators within MDOT include the following positions:

- SESC Staff in C&T;
- Region Resource Analysts/Specialists
- Region Soils Engineers
- Development (design) Engineers;
- Delivery Engineers (construction project engineers) and their assistants;
- Senior Construction Technicians (senior inspectors)
- Maintenance Supervisors/Coordinators; and
- Aeronautics Project Managers.

The MDEQ-sponsored comprehensive SESC examination for program administrators covers of the following topics:

- Storm Water Runoff, Soil Erosion and Sedimentation: Processes and Impacts
- Controlling Runoff, Erosion, and Sedimentation on Construction Sites
- Vegetative Stabilization
- Plan Development, Information Sources, Plan Review and Inspections
- Laws, Rules and Inspections
- [SESC] Statute and Administrative Rules
- Soils and Runoff
- Revised Universal Soil Loss Equation (RUSLE)
- Sedimentation Basins
- Diversions

Exception for Inspectors: Individuals responsible only for conducting SESC inspections, including enforcing MDOT standards and specifications to ensure continued site compliance during earth change operations, will complete the MDEQ-sponsored SESC/CSWO Inspector exam. SESC Inspectors are responsible for ensuring that SESC measures are implemented and maintained according to the plans, procedures and specification requirements and that the prescribed measures are effective in minimizing soil erosion and preventing off-site sedimentation. SESC Inspectors may order a contractor or in-house staff to install or maintain any control measures identified in the plans or in established Performance Guides in the case of Maintenance operations. If the prescribed SESC measures included in the plans or performance

guides, are not effective, the SESC Inspector will seek the advice and assistance of an individual who has completed the comprehensive SESC exam.

At a minimum, SESC Inspectors include the following positions when an individual is designated as the inspector for earth change operations or when SESC inspection is part of work duties:

- Construction Technicians (journeyman level); and
- Transportation Maintenance Workers

The MDEQ-sponsored certification program for SESC inspectors consists of general instruction on sedimentation and erosion control issues including the following topics:

- Storm Water Runoff, Soil Erosion and Sedimentation: Processes and Impacts
- Controlling Runoff, Erosion, and Sedimentation on Construction Sites
- Vegetative Stabilization
- Plan Development, Information Sources, Plan Review and Inspections
- Laws, Rules and Inspections

1.2.3 NPDES (Part 31 Storm Water) Training – Effective May 1, 2009 the certified storm water operator training previously offered by the MDEQ is no longer provided as a separate training class. These individuals will instead complete the SESC/CSWO Inspector examination and will be qualified to perform both storm water and SESC inspections. Individuals responsible for conducting storm water inspections are required to inspect soil erosion and sedimentation control measures for compliance with the NPDES requirements. In addition, the storm water inspectors are responsible for ensuring that sediment and other pollutants and wastes originating from the site do not enter surface waters of the state.

In most cases, MDOT staff identified as SESC inspectors will conduct storm water inspections concurrently with SESC inspections for construction and maintenance operations. As the MDOT Storm Water Management Program expands, certain individuals may also be required to conduct inspections of structural, vegetative, and operational storm water best management practices not associated with active construction and maintenance operations.

1.2.4 Recertification - Certification under either the comprehensive SESC or the SESC/CSWO inspector program is valid for five years. Completing the recertification process, including passing the MDEQ exam for the level of recertification sought, is required for renewal.

1.2.5 In-House Training - Additional training related to environmental stewardship including erosion control and storm water management will be developed and conducted on an as-needed basis. This in-house training may be substituted as a refresher course for individuals who have previously completed the appropriate level of MDEQ-sponsored training and whose five-year certification must be renewed. Individuals taking the in-house training as a refresher course will be required to pass the MDEQ exam for the level of recertification sought.

1.2.6 Earth Change Plan - An earth change plan conforming to rule R323.1703 will be prepared by MDOT for projects and activities involving earth changes that are not covered by the approved procedures in this manual. The elements of this plan may be

incorporated throughout the MDOT contract documents or may be a stand-alone document for projects and activities that do not involve preparation of a full set of plans. At this time, the only exception to this requirement is ditch clean-out (Activity 12300) when this activity is conducted according to MDOT-approved work methods.

The Contractor is required to develop an earth change plan for earth change activity undertaken outside the limits of earth disturbance but within the right-of-way. The Engineer will review all earth change plans submitted by the Contractor to determine if all requirements of rule R323.1703 are addressed and that the plan is effective. This review and approval will be completed before the Contractor is allowed to begin any earth change activity in the area between the limits of earth disturbance and the right-of-way.

NOTE: *The Contractor is required to develop an earth change plan unless the only earth change activity undertaken outside the limits of earth disturbance is within the clearing limits as specified by subsection 201 of the standard specifications and as shown on the plans. However, adequate measures must be implemented and maintained to effectively prevent or reduce erosion and subsequent off-site sedimentation that may result from this activity.*



JENNIFER M. GRANHOLM
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING



STEVEN E. CHESTER
DIRECTOR

TO: Soil Erosion and Sedimentation Control Personnel

FROM: Dick Mikula, Field Operations Division, Water Bureau *Dick Mikula*

DATE: March 18, 2009

SUBJECT: Soil Erosion and Sedimentation Control (SESC) Training and Certified Storm Water Operator (CSWO) Training

Over the last several years, many of you have suggested that the Department of Environmental Quality (DEQ) should combine the SESC training and CSWO training and reduce the training requirements for those individuals that only conduct SESC inspections versus reviewing plans, issuing permits, and pursuing compliance and enforcement actions. The DEQ has responded to your suggestions and have made the following revisions to the current training requirements and existing training programs:

- 1) Individuals in SESC programs whose responsibilities are limited to only conducting site inspections no longer have to take the entire Comprehensive SESC training.
- 2) The certified storm water operator training previously offered by the DEQ is no longer provided as a separate training class.
- 3) An individual completing the new Inspector training course will be qualified to perform both storm water and SESC inspections.

When determining whether you or a member of your staff should complete the Comprehensive SESC training or only the new Inspector training course, please be aware that the duties of an SESC inspector are very limited. *An SESC inspector is limited to ensuring that SESC measures are implemented and maintained per plan, procedure, and specification requirements and that the prescribed measures are effective in minimizing soil erosion and preventing off-site sedimentation. The SESC inspector may order the contractor or owner to install or maintain any control measures that were identified on the approved SESC plan. However, if the prescribed measures are not effective, the SESC inspector cannot order or suggest other measures that are not indicated on the plan; he/she must seek assistance from the person responsible for developing or approving the plan or someone that has completed the Comprehensive SESC training.*

The DEQ is in the process of developing a new training manual that will cover the information required to complete both the Inspector training and the Comprehensive SESC training requirements. However, at this time, only Units 1-5 of the manual are complete; those are the Units necessary to complete the Inspector training. The new manual will be available on the Web site by April 1, 2009. Those individuals required to complete the Comprehensive SESC training will continue to use the *SESC Training Manual* that is currently being used for the SESC training. That manual is also on the

SESC Web site. The SESC Web site can be accessed by going to www.michigan.gov/deqwb and clicking on "Soil Erosion and Sedimentation Control."

Individuals who are required to take the Comprehensive SESC training are not required to take the Inspector training prior to taking the Comprehensive training. The *SESC Training Manual* includes the information covered in the Inspector training.

The Inspector training exam and Comprehensive SESC exam will be given at the same time at any exam location identified on the SESC Web site after **May 1, 2009**. The appropriate exam will be given to you when you arrive at the exam location.

Note: *Exams scheduled for March and April on the SESC Web site will continue to be separate for the certified storm water operator exams and the Comprehensive SESC exam.*

Effective May 1, 2009, the only "training" option available for either the Inspector training or the Comprehensive SESC training is a **self-study** course. You are required to study the appropriate manual on your own and then take the exam at one of the DEQ district offices. There is no fee to take either exam. However, individuals who must retake an exam because they failed the first exam will be charged \$50.

The Inspector training course is designed for SESC and CSWO inspectors. It includes information from the old *Construction Site Storm Water Certified Operator Training Manual* in addition to basic SESC information presented in the *SESC Training Manual*. The Inspector training exam will cover Units 1-5 of the new manual entitled *Construction Storm Water & Soil Erosion and Sedimentation Control Inspector Training Manual*; that manual will be available on the SESC Web site by April 1, 2009.

As indicated above, individuals required to complete the Comprehensive SESC training will continue to use the old *SESC Training Manual* (revised November 2007) which is also posted on the SESC Web site. The exam will cover the entire manual (Units 1-12).

Registration information and available exam locations and dates will be posted on the SESC Web site by March 25, 2009. To register to take the exam for the first time, contact the DEQ staff in the district office where you wish to take the exam. If it is necessary to retake an exam, you will be notified by the Lansing Central office. Registering for the **retake exams** will require submitting the registration form and fee to the Cashier's office at the address indicated on the form.

By the end of this year or early next year, the DEQ expects to offer an optional overview class as part of the Inspector training and an optional one-day class as part of the Comprehensive SESC training. A fee will be charged for attending the training sessions. When those classes become available, information will be posted on the Web site.