

# HYDRAULIC DESIGN ADVISORY

## HDA 07-01

Date: May 14, 2007

SUBJECT: STORMWATER MANAGEMENT PLANS

AUTHOR: ROY T. MILLS  
STATE HYDRAULICS ENGINEER  
ESC & SWM PROGRAM ADMINISTRATOR

A review of the of the Virginia Stormwater Management Regulations issued July 1, 2006 and a review of VDOT construction projects statewide has identified a need to amend and/or clarify previously issued guidance regarding the application of water quality requirements on VDOT projects.

The Location and Design Division's Instructional and Informational Memorandum IIM-LD-195.5 is amended to replace the first and second bullets under the Water Quality Control section (Sheet 4 and 5 of 14) with the following:

- Regulated Land Disturbance Activities are defined as those activities that disturb one acre or greater except in those areas designated as a Chesapeake Bay Preservation Area in which case the land disturbance threshold is 2,500 square feet or greater.
- "Land Disturbing Activity" or "Land Disturbance" is defined as a manmade change to the land surface that potentially changes its runoff characteristics including any clearing, grading or excavation associated with a construction activity. The effects of a change to the land surface should be based on the proposed permanent condition and should consider the effects of a mature vegetative cover and should not be based on the temporary surface changes during construction activities. The temporary surface changes during construction activities are addressed by the Virginia Erosion and Sediment Control Regulations.
- A water quality control plan for the Regulated Land Disturbance Activity shall be developed for each outfall or watershed unless it meets one of the following exemptions:
  1. Linear development projects (i.e., highway construction projects) where **all** of the following conditions are met:
    - a. Less than one acre will be disturbed per outfall or watershed
    - b. There will be insignificant increases in peak flow rates downstream of the discharge point.
    - c. There is no existing or anticipated flooding or erosion problems downstream of the discharge point.
  2. Routine maintenance activities that are performed to maintain the original line and grade, hydraulic capacity or original construction of the project and that disturbs less than five acres of land.

The Hydraulics Engineer is to add a note to the Stormwater Management Section of the General Notes identifying the following:

1. The applicability of the Virginia Stormwater Management Regulations to the proposed land disturbance activity. If not applicable, state the reason why not.
2. A general description of the stormwater management plan for the land disturbance activity.
3. The location of any specific outfall or watershed where the water quality requirements are not being addressed and the reason why not.
4. Any proposed non-conventional and/or unusual stormwater management practices being used to meet water quality requirements (e.g., Low Impact Development (LID) practices, participation in regional facilities, stream restoration, street sweeping, agreements with others, etc.

The project's hydraulic files are to be thoroughly documented regarding all water quality alternatives considered and reasons for the selected plan.

Instructional and Informational Memoranda IIM-LD-110.18 and 195.5 will be revised in the near future to incorporate these changes as well as others that may be necessary to bring them up to date with current regulatory requirements. In the interim, the guidelines in this HDA should be implemented immediately on all regulated land disturbance activities that have not progressed beyond the right of way stage, where additional right of way would be required to implement these guidelines, or the pre-advertisement stage, where implementation of these guidelines can be accomplished within the identified right of way.