4-4. Erosion and Sediment Control Monitoring

To ensure the successful performance of erosion and sediment control measures, it is essential to monitor the control measures and other construction activities, and to adjust, modify, and install additional controls to address evolving conditions. During construction, site conditions undergo frequent and sometimes continual change as earthwork activity proceeds, construction moves from one phase to another, and disturbed areas are stabilized. Changing weather conditions, construction traffic, and other conditions can affect the condition and performance of erosion and sediment control measures. As time passes, erosion and sediment control devices and finished or partially stabilized surfaces are subject to wear and incidental damage. Control measures must be maintained in serviceable condition to remain effective. Because of these changing site conditions, the contractor must continually monitor erosion and sediment control measures to ensure that they perform as intended and that they receive appropriate and timely maintenance. Further, the contractor should periodically evaluate general site conditions, to assess whether additional measures are needed to prevent erosion and sedimentation.

Inspection of Erosion and Sediment Controls

The contractor should assign a qualified person or persons who have the responsibility and authority for the implementation, operation, monitoring, and maintenance of erosion and sediment control measures to conduct inspections of erosion and sediment controls. The qualified personnel should be knowledgeable in the principles and practice of erosion and sediment controls and possesses the skills to assess conditions at the construction site that could impact stormwater quality as well as to assess the effectiveness of any sediment and erosion control measures selected to control the quality of stormwater discharges from the construction activity.

The person's responsibilities should include:

- Ensuring measures stipulated in design plans and permit documents are installed in the required locations;
- Inspecting the site and arranging for installation of additional controls where and when required;
- Periodically inspecting BMPs that have been installed, to confirm that the measures are functional and meeting their intended purposes, and arranging for cleaning or repairs as indicated by such inspection. Each measure described in this Manual has inspection requirements included in the section entitled "Maintenance". Many of the measures require inspections at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater; others require daily inspection or ongoing monitoring, particularly during periods of continual rainfall. More frequent inspections than those identified in the measure may be necessary for sites that are heavily traveled, when weather conditions are severe, and before major storms.
- Arranging for corrective action when control measures fail or are found to be otherwise ineffective. The person should coordinate with a professional experienced in erosion and sediment control (and any approving agency when that agency's approval is required) to assess the reason for failure and determine a course of action to restore the function of the measure, or install an alternative measure.
- Ensuring all erosion and sediment controls are properly installed and maintained on the construction site before predicted major storms. A major storm is defined as a storm predicted by the National Office of Atmospheric Administration (NOAA) Weather Service with warnings of flooding, severe thunderstorms or similarly severe weather conditions or effects.

- Arranging for the timely revision, as warranted, of any Storm Water Pollution Prevention Plan (SWPPP) prepared for the project.
- Maintaining records of inspections, maintenance activities, corrective actions, repairs, and completion of permanent stabilization measures.

Contingency Measures During Construction

The Erosion and Sediment Control Plan and/or SWPPP should include provisions for addressing construction contingencies, specifically tailored to the site conditions and water resources associated with the project. At a minimum, the contractor should provide for the following:

- A designated responsible person(s) for conducting the inspection and the follow-up adjustments and repairs, with the authority to implement necessary adjustments and additions to erosion and sediment controls to meet evolving conditions and address emergency problems. Around-the-clock contact information for the person(s) should be furnished to municipal authorities (and NHDES personnel, as applicable), to facilitate communications during emergency events.
- A dedicated stock of common materials for use in addressing erosion or sediment contingencies. Examples include, but are not necessarily limited to:
    - Spare silt fence, hay or straw bales, or erosion control mix for use as temporary sediment barriers.
    - Stockpile of mulch material for use in stabilizing areas damaged by weather or construction, along with mulch anchoring material.
    - Spare erosion control mat.
    - Stockpile(s) of stone suitable for repairing construction exits, check dams, and channel linings.