E. OPERATIONS & MAINTENANCE

Purpose

Incorporate pollution prevention procedures into the operation and maintenance of roads, highways, and bridges to reduce pollutant loadings to surface waters.

Applicability

This management measure is intended to be applied by States to existing, restored, and rehabilitated roads, highways, and bridges.

Practices

1. Seed and fertilize, seed and mulch, and/or sod damaged vegetated areas and slopes.
2. Establish pesticide/herbicide use and nutrient management programs.

   Refer to the Management Measure for Construction Site Chemical Control.
3. Restrict herbicide and pesticide use in highway rights-of-way to applicators certified under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) to ensure safe and effective application.
4. The use of chemicals such as soil stabilizers, dust palliatives, sterilants, and growth inhibitors should be limited to the best estimate of optimum application rates. All feasible measures should be taken to avoid excess application and consequent intrusion of such chemicals into surface runoff.
5. Sweep, vacuum, and wash residential/urban streets and parking lots.
6. Collect and remove road debris.
7. Cover salt storage piles and other deicing materials to reduce contamination of surface waters. Locate them outside the 100-year floodplain.
8. Regulate the application of deicing salts to prevent over-salting of pavement.
9. Use specially equipped salt application trucks.
10. Use alternative deicing materials, such as sand or salt substitutes, where sensitive ecosystems should be protected.
11. Prevent dumping of accumulated snow into surface waters.
12. Maintain retaining walls and pavements to minimize cracks and leakage.
13. Repair potholes.
14. Encourage litter and debris control management.
15. Develop an inspection program to ensure that general maintenance is performed on urban runoff and NPS pollution control facilities.
16. To be effective, erosion and sediment control devices and practices must receive thorough and periodic inspection checks. The following is a suggested checklist for the inspection of erosion and sediment controls:

- Clean out sediment basins and traps; ensure that structures are stable.
- Inspect silt fences and replace deteriorated fabrics and wire connections; properly dispose of deteriorated materials.
- Renew riprapped areas and reapply supplemental rock as necessary.
- Repair/replace check dams and brush barriers; replace or stabilize straw bales as needed.
- Regrade and shape berms and drainage ditches to ensure that runoff is properly channeled.
- Apply seed and mulch where bare spots appear and replace matting material if deteriorated.
- Ensure that culverts and inlets are protected from siltation.
- Inspect all permanent erosion and sediment controls on a scheduled, programmed basis.

17. Ensure that energy dissipators and velocity controls to minimize runoff velocity and erosion are maintained.
18. Dispose of accumulated sediment collected from urban runoff management and pollution control facilities, and any wastes generated during maintenance operations, in accordance with appropriate local, State, and Federal regulations.
19. Use techniques such as suspended tarps, vacuums, or booms to reduce, to the extent practicable, the delivery to surface waters of pollutants used or generated during bridge maintenance (e.g., paint, solvents, scrapings).
20. Develop education programs to promote the practices listed above.