APPENDIX A
NPDES Permit
AASHTO Guidelines
GENERAL PERMIT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
STORM WATER DISCHARGE PERMIT
Oregon Department of Environmental Quality
811 SW Sixth Avenue, Portland, OR 97204, (503) 229-5279
Issued pursuant to ORS 468B.050 and The Federal Clean Water Act

ISSUED TO:
All public agencies responsible for construction activities with storm water discharges that are covered by this permit. The submittal of an approved application and payment of applicable fees are required.

SOURCES COVERED BY THIS PERMIT:
All Construction activities including clearing, grading, excavation, and stockpiling activities under the authority or jurisdiction of a public agency that will result in the disturbance of five or more acres. Also included are activities that disturb a total of five or more acres if part of a larger common plan of development.

Effective December 1, 2002 the previously described construction activities will include land disturbance of one acre or more, and will also include activities that disturb a total of one or more acres if part of a larger common plan of development.

This permit does not authorize in-water or riparian work. These activities are regulated by the Oregon Division of State Lands, US Army Corp of Engineers, and/or the DEQ Section 401 certification program.

PERMITTED ACTIVITIES
Until this permit expires or is modified or revoked, the permittee is authorized to construct, install, modify, or operate erosion and sediment control measures, and storm water treatment and control facilities, and to discharge storm water to public waters in conformance with all the requirements, limitations, and conditions set forth in the attached schedules as follows:

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Unless specifically authorized by this permit, by another NPDES or WPCF permit, or by Oregon Administrative Rule, any other direct or indirect discharge to waters of the state is prohibited, including discharges to an underground injection control system.
SCHEDULE A
LIMITATIONS AND CONTROLS FOR STORM WATER DISCHARGES

1. **Performance Limitations** An Erosion and Sediment Control Plan (ESCP) shall be developed and implemented to prevent the discharge of significant amounts of sediment to surface waters. The following conditions describe significant amounts of sediment and shall be prevented from occurring.

   a. Earth slides or mud flows that leave the construction site and are likely to discharge to surface waters.

   b. Evidence of concentrated flows* of water causing erosion when such flows are not filtered or settled to remove sediment prior to leaving the construction site and are likely to discharge to surface waters. Evidence includes the presence of rills, rivulets or channels.

   c. Turbid flows* of water that are not filtered or settled to remove turbidity prior to leaving the construction site and are likely to discharge to surface waters.

   d. Deposits of sediment at the construction site in areas that drain to unprotected storm water inlets or catch basins that discharge to surface waters. Inlets and catch basins with failing sediment controls due to lack of maintenance or inadequate design will be considered unprotected.

   e. Deposits of sediment from the construction site on public or private streets outside of the permitted construction activity that are likely to discharge to surface waters.

   f. Deposits of sediment from the construction site on any adjacent property outside of the permitted construction activity that are likely to discharge to surface waters.

   * Flow to storm water inlets or catch basins located on the site will be considered “leaving the site” if there are no sediment control structures designed for expected construction flows downstream of the inlets or catch basins that are under the permittee’s control.

2. **Erosion and Sediment Control Plan Preparation and Submittal** The permittee shall ensure that a comprehensive ESCP is prepared and implemented for the construction activity regulated by this permit.

   a. A copy of the ESCP shall be retained on-site and made available to the Department upon request. During inactive periods of greater than seven (7) consecutive calendar days, the ESCP shall be retained by the permittee.

   b. The Department may request modifications to the ESCP at any time if the ESCP is ineffective at preventing the discharge of significant amounts of sediment and turbidity to surface waters.

   c. The ESCP shall include any procedures necessary to meet local erosion and sediment control requirements or storm water management requirements.

   d. If possible, during the period of October through May, construction activities should avoid or minimize excavation and bare ground activities. If the operator chooses to continue land disturbance activities within this period, additional wet weather requirements (refer to A.3.d) are required in the ESCP. Specifically, if construction activity occurs during the winter season...
where slopes are greater than five (5) percent and the soils have medium to high erosion potential additional erosion controls will be required.

e. The following non-storm water discharges are allowed as long as they are identified in the ESCP and all necessary controls are implemented to minimize sediment transport. These include: firefighting activity, hydrant flushing and potable waterline flushing (DEQ guidance must be followed), air conditioning condensate, dewatering activities of uncontaminated groundwater or spring water, and uncontaminated foundation or footer drain water.

3. **Erosion and Sediment Control Plan Requirements** The ESCP shall, at a minimum, include the following elements.

a. **Site Description** A description of the following:
   i. Nature of the construction activity, including a proposed timetable for major activities.
   ii. Estimates of the total area of the permitted site and the area of the site that is expected to undergo clearing, grading and/or excavation.
   iii. Nature of the fill material to be used, the in situ soils, and the erosion potential of such soils.
   iv. Names of the receiving water(s) for storm water runoff.

b. **Site Map** Indicating the following: (Note: In order to provide all the required information, a general location map in addition to the site map is required.)
   i. Areas of total development
   ii. Drainage patterns
   iii. Areas of total soil disturbance (including, but not limited to, showing cut and fill areas and pre and post development elevation contours)
   iv. Areas used for the storage of soils or wastes
   v. Areas where vegetative practices are to be implemented. Include type of vegetation seed mix.
   vi. Location of all erosion and sediment control measures or structures
   vii. Location of impervious structures after construction is completed. Include buildings, roads, parking lots, outdoor storage areas, etc., if any.
   viii. Springs, wetlands and other surface waters located on-site
   ix. Boundaries of the 100-year flood plain if determined
   x. Location of storm drainage outfalls to receiving water(s) if applicable
   xi. Location of drinking water wells and underground injection controls
   xii. Details of sediment and erosion controls
   xiii. Details of detention ponds, storm drain piping, inflow and outflow details

c. **Required Controls and Practices** The following controls and practices are required:
   i. Each site shall have graveled, paved, or constructed entrances, exits and parking areas, prior to beginning any other work, to reduce the tracking of sediment onto public or private roads.
   ii. All unpaved roads located on-site shall be graveled. Other effective erosion and sediment control measures either on the road or down gradient may be used in place of graveling.
   iii. When trucking saturated soils from the site, either water-tight trucks shall be used or loads shall be drained on-site until dripping has been reduced to minimize spillage on roads.
   iv. A description of procedures that describe controls to prevent the discharge of all wash water from concrete trucks.
   v. A description of procedures for correct installation or use of all erosion and sediment control measures.
vi. A description of procedures for prompt maintenance or repair of erosion and sediment control measures utilized on-site (refer to A.4).

d. Additional Controls and Practices Additional controls and practices shall be developed that are appropriate for the site. At a minimum the following shall be considered:

i. A description of clearing and grading practices, including a schedule of implementation, that will minimize the area of exposed soil throughout the life of the project. Whenever practicable, clearing and grading shall be done in a phased manner to prevent exposed inactive areas from becoming a source of erosion.

ii. A description of vegetative erosion control practices, including a schedule of implementation, designed to preserve existing vegetation where practicable and re-vegetate open areas when practicable after grading or construction.

In developing vegetative erosion control practices, at a minimum the following shall be considered: temporary seeding, permanent seeding, mulching, sod stabilization, vegetative buffer strips, and protection of trees with protective construction fences.

iii. A description of additional erosion control practices, including a schedule of implementation, designed to protect exposed areas and prevent soil from being eroded by storm water.

In developing additional erosion control practices, at a minimum the following shall be considered: mulching with straw or other vegetation, use of erosion control blankets, and application of soil tackifiers.

iv. A description of sediment control practices, including a schedule of implementation, that will be used to divert flows from exposed soil, store flows to allow for sedimentation, filter flows, or otherwise reduce soil laden runoff. All temporary sediment control practices shall not be removed until permanent vegetation or other cover of exposed areas is established.

In developing sediment control practices, at a minimum the following shall be considered: use of silt fences, earth dikes, brush barriers, drainage swales, check dams, subsurface drains, pipe slope drains, rock outlet protection, sediment traps, and temporary or permanent sedimentation basins.

v. A description of erosion and sediment control practices that will be used to prevent stockpiles from becoming a source of erosion. Stockpiles located away from the construction activity but still under the control of the permittee shall also be protected to prevent significant amounts of sediment from discharging to surface waters. At the end of each workday the soil stockpiles must be stabilized or covered.

In developing these practices, at a minimum the following shall be considered: diversion of uncontaminated flows around stockpiles, use of cover over stockpiles, and installation of silt fences around stockpiles.

vi. A description of the best management practices that will be used to prevent or minimize storm water from being exposed to pollutants from spills, cleaning and maintenance activities, and waste handling activities. These pollutants include fuel, hydraulic fluid, and other oils from vehicles and machinery, as well as debris, leftover paints, solvents, and
glues from construction operations. The reuse and recycling of construction wastes should be promoted.

In developing these practices, at a minimum the following shall be considered: written spill prevention and response procedures; employee training on spill prevention and proper disposal procedures; regular maintenance schedule for vehicles and machinery; and covered storage areas for waste and supplies.

4. **Maintenance Requirements** The following maintenance activities shall be implemented.

- a. Significant amounts of sediment that leave the site shall be cleaned up within 24 hours and placed back on the site or properly disposed. Any in-stream clean up of sediment shall be performed according to Oregon Division of State Lands' required timeframe.

- b. Under no conditions shall sediment be intentionally washed into storm sewers or drainageways unless it is captured by a BMP before entering receiving waters.

- c. For a filter fence, the trapped sediment shall be removed before it reaches one third of the above ground fence height.

- d. For catch basin protection, cleaning must occur when design capacity has been reduced by fifty percent.

- e. For a sediment basin, removal of trapped sediments shall occur when design capacity has been reduced by fifty percent.

- f. All erosion and sediment controls not in the direct path of work shall be installed before any land disturbance.

- g. If fertilizers are used to establish vegetation, the application rates shall follow manufacture's guidelines and the application shall be done in such a way to minimize nutrient-laden runoff to receiving waters.

- h. If construction activities cease for thirty (30) days or more, the entire site must be stabilized, using vegetation or a heavy mulch layer, temporary seeding, or another method that does not require germination to control erosion.

- i. Any use of toxic or other hazardous materials shall include proper storage, application, and disposal.

- j. The permittee shall manage abandoned hazardous wastes, used oils, contaminated soils or other toxic substances discovered during construction activities in a manner approved by the Department.

- k. If a storm water treatment system for construction activities is employed, the operation and maintenance plan shall be submitted to the Department for approval.

5. **Additional Requirements**

- a. Water Quality Standards:
   The ultimate goal for permittees is to comply with water quality standards in OAR 340-41. In instances where a storm water discharge adversely impacts water quality, the Department may
require the facility to implement additional management practices, apply for an individual permit, or take other appropriate action.

b. Turbidity (Nephelometric Turbidity Units, NTU) Water Quality Standard:
No more than a ten percent cumulative increase in natural stream turbidities shall be allowed, as measured relative to a control point immediately upstream of the turbidity causing activity. However, limited duration activities necessary to address an emergency or to accommodate essential dredging, construction or other legitimate activities and which cause the standard to be exceeded may be authorized provided all practicable turbidity control techniques have been applied and one of the following has been granted:

(A) Emergency activities: Approval coordinated by DEQ with the Department of Fish and Wildlife under conditions they may prescribe to accommodate response to emergencies or to protect public health and welfare;
(B) Dredging, Construction or other Legitimate Activities: Permit or certification authorized under terms of Section 401 or 404 (Permits and Licenses, Federal Water Pollution Control Act) or OAR 141-085-0100 et seq. (Removal and Fill Permits, Division of State Lands), with limitations and conditions governing the activity set forth in the permit or certificate.
[see OAR 340-041-(basin)(2)(c)]

c. Water Quality Limited Streams:
The Department may establish additional controls on construction activities that discharge storm water runoff to water quality limited streams if Total Maximum Daily Loads are established and construction activities are determined to be a significant contributor to these loads. The Department may also require application for individual permit or develop a watershed-based general permit for the activity.
SCHEDULE B
MINIMUM MONITORING REQUIREMENTS

All Sites

1. A person with knowledge and experience in construction storm water controls and management practices shall conduct the inspections. The ESCP shall identify the person(s) and/or title of the personnel that will conduct the inspections and provide a contact phone number for such person(s).

Active Sites

2. Frequency of inspections shall be daily during storm water runoff or snowmelt runoff and at least once every seven (7) calendar days and within 24 hours after any storm event of greater than 0.5 inches of rain per 24-hour period.

Inactive Sites

3. During inactive periods of greater than seven (7) consecutive calendar days, inspections shall only be required once every two (2) weeks.

4. Prior to discontinuing activities at the site, any exposed area shall be stabilized to prevent erosion. Stabilization may occur by applying appropriate cover (mulch, erosion control blanket, soil tackifier, etc.) or establishing adequate vegetative cover.

5. When a site is inaccessible due to adverse weather conditions, inspections shall not be required. Adverse weather condition shall be recorded on the inspection sheet.

6. Prior to leaving an inactive site or in anticipation of site inaccessibility, existing erosion and sediment control measures shall be inspected to ensure that they are in working order. Any necessary maintenance or repair shall be made prior to leaving the site.

Written Records

7. All visual inspections must document the following information:

a. Inspection date, inspector’s name, weather conditions, and rainfall amount for past 24 hours (inches). (Rainfall information can be obtained from the nearest weather recording station.)

b. List observations of all BMPs: erosion and sediment controls, chemical and waste controls, locations where vehicles enter and exit the site, status of areas that employ temporary or final stabilization control, soil stockpile area, and nonstormwater controls.

c. At representative discharge location(s) from the construction site conduct observation and document the quality of the discharge for any turbidity, color, sheen, or floating materials. If possible, in the receiving stream, observe and record color and turbidity or clarity upstream and downstream within 30 feet of the discharge from the site. For example, a sheen or floating material could be noted as present/absent, if observation is yes, it could indicate concern about a possible spill and/or leakage from vehicles or materials storage. For turbidity and color an observation would describe any apparent color and the clarity of the discharge, and any apparent difference in comparison with the receiving stream.
d. If significant amounts of sediment are leaving the property, briefly explain the corrective measures taken to reduce the discharge and/or clean it up and describe efforts to prevent future releases. The ESCP shall be amended accordingly.

e. If a site is inaccessible due to inclement weather the inspection shall include observations at a relevant discharge point or downstream location, if practical.

8. All inspection records for an active site shall be kept on-site or be maintained with the permittee, and shall made available to the Department, its Agent, or local municipality upon request.

9. A written record of inspections for an inactive site shall be maintained with the permittee and made available to the Department, its Agent, or local municipality upon request.

10. Retention of all inspection records shall be for a period of one year from project completion.
SCHEDULE C
COMPLIANCE SCHEDULE

1. Registration of Underground Injection Systems (40 CFR 144 and OAR 340-044). The permittee shall submit to DEQ a registration form if construction activities include disposal of storm water or other wastewater discharges to an injection system. These types of disposal systems are classified under the Underground Injection Control Program as a Class V well, require registration, and must meet Division 44 standards.

   a. A new permittee shall register any applicable underground treatment systems prior to the construction of a new facility.

   b. For facilities covered by the previous 1200-CA permit the registration form is due within thirty (30) days after receipt of this new 1200-CA permit.
SCHEDULE D
SPECIAL CONDITIONS

1. Issuance of this permit does not relieve the permittee from all other permitting and licensing requirements. Prior to beginning construction activities, all other necessary approvals shall be obtained.

2. The permit will remain in effect after the expiration date or until another permit is issued if the permittee has paid all fees and has filed a renewal application.

3. Any permittee that does not want to be covered or limited by this general permit may make application for an individual NPDES permit in accordance with the procedures in OAR 340-45-030.

4. Permit Specific Definitions:

*Best Management Practices (BMPs)* Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the state. BMPs include treatment systems, erosion and sediment control, source control, and operating procedures and practices to control: site runoff, spillage or leaks, and waste disposal.

*Dewatering* The removal and disposal of surface water or groundwater for purposes of preparing a site for construction.

*Erosion* The movement of soil particles resulting from the tracking, flow or pressure from storm water or wind.

*Grade* Construction activity that causes the disturbance of the earth. This shall include but not be limited to any excavating, filling, stockpiling of earth materials, grubbing, root mat or topsoil disturbance, or any combination of them.


*Phasing* Clearing a parcel of land in distinct phases, with the stabilization of each phase before clearing of the next phase; including soil stockpiling.

*Stabilization* The completion of all soil disturbance activities at the site and the establishment of a permanent vegetative cover, or equivalent permanent stabilization measures (such as riprap, gabions, geotextiles, or bioengineering methods) that will prevent erosion.

*Start of Construction* The first land-disturbing activity associated with a development, including land preparation such as clearing, grading, excavation, and filling; installation of streets and walkways; erection of temporary forms; and installation of accessory buildings such as garages.

*Storm Water* Storm water runoff, snow melt runoff, and surface runoff associated with a storm event.

*Turbidity* An expression of the optical property of a sample which causes light to be scattered and absorbed rather than transmitted in a straight line through the sample. It is caused by the presence of suspended matter in a liquid.
SCHEDULE F
NPDES GENERAL CONDITIONS

SECTION A. STANDARD CONDITIONS

1. Duty to Comply
   The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of Oregon Revised Statutes (ORS) 468B.025 and is grounds for enforcement action; for permit termination, suspension, or modification; or for denial of a permit renewal application.

2. Penalties for Water Pollution and Permit Condition Violations
   Oregon Law (ORS 468.140) allows the Director to impose civil penalties up to $10,000 per day for violation of a term, condition, or requirement of a permit.
   Under ORS 468.943, unlawful water pollution, if committed by a person with criminal negligence, is punishable by a fine of up to $25,000 or by imprisonment for not more than one year, or by both. Each day on which a violation occurs or continues is a separately punishable offense.
   Under ORS 468.946, a person who knowingly discharges, places or causes to be placed any waste into the waters of the state or in a location where the waste is likely to escape into the waters of the state, is subject to a Class B felony punishable by a fine not to exceed $200,000 and up to 10 years in prison.

3. Duty to Mitigate
   The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. In addition, upon request of the Department, the permittee shall correct any adverse impact on the environment or human health resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

4. Duty to Reapply
   If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and have the permit renewed. The application shall be submitted at least 180 days before the expiration date of this permit.
   The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date.

5. Permit Actions
   This permit may be modified, suspended, revoked and reissued, or terminated for cause including, but not limited to, the following:
   a. Violation of any term, condition, or requirement of this permit, a rule, or a statute;
   b. Obtaining this permit by misrepresentation or failure to disclose fully all material facts; or
   c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

   The filing of a request by the permittee for a permit modification or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. Toxic Pollutants
   The permittee shall comply with any applicable effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

7. Property Rights
   The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.

8. Permit References
   Except for effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act, all rules and statutes referred to in this permit are those in effect on the date this permit is issued.

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance
   The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with
the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls, and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

2. **Durv to Halt or Reduce Activity**

For industrial or commercial facilities, upon reduction, loss, or failure of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. **Bypass of Treatment Facilities**

a. **Definitions**

(1) "Bypass" means intentional diversion of waste streams from any portion of the treatment facility. The term "bypass" does not include nonuse of singular or multiple units or processes of a treatment works when the nonuse is insignificant to the quality and/or quantity of the effluent produced by the treatment works. The term "bypass" does not apply if the diversion does not cause effluent limitations to be exceeded, provided the diversion is to allow essential maintenance to assure efficient operation.

(2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities or treatment processes which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. **Prohibition of bypass.**

(1) Bypass is prohibited unless:

   a. Bypass was necessary to prevent loss of life, personal injury, or severe property damage;

   b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and

   c. The permittee submitted notices and requests as required under General Condition B.3.c.

(2) The Director may approve an anticipated bypass, after considering its adverse effects and any alternatives to bypassing, when the Director determines that it will meet the three conditions listed above in General Condition B.3.b.(1).

c. **Notice and request for bypass.**

(1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior written notice, if possible at least ten days before the date of the bypass.

(2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in General Condition D.5.

4. **Upset**

a. **Definition.** "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operation error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

b. **Effect of an upset.** An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of General Condition B.4.c are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. **Conditions necessary for a demonstration of upset.** A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

   (1) An upset occurred and that the permittee can identify the causes(s) of the upset;

   (2) The permitted facility was at the time being properly operated;

   (3) The permittee submitted notice of the upset as required in General Condition D.5, hereof (24-hour notice); and

   (4) The permittee complied with any remedial measures required under General Condition A.3 hereof.

d. **Burden of proof.** In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.
5. Treatment of Single Operational Event
For purposes of this permit, a Single Operational Event which leads to simultaneous violations of more than one pollutant parameter shall be treated as a single violation. A single operational event is an exceptional incident which causes simultaneous, unintentional, unknowing (not the result of a knowing act or omission), temporary noncompliance with more than one Clean Water Act effluent discharge pollutant parameter. A single operational event does not include Clean Water Act violations involving discharge without a NPDES permit or noncompliance to the extent caused by improperly designed or inadequate treatment facilities. Each day of a single operational event is a violation.

6. Overflows from Wastewater Conveyance Systems and Associated Pump Stations
   a. Definitions
      (1) "Overflow" means the diversion and discharge of waste streams from any portion of the wastewater conveyance system including pump stations, through a designed overflow device or structure, other than discharges to the wastewater treatment facility.
      (2) "Severe property damage" means substantial physical damage to property, damage to the conveyance system or pump station which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of an overflow.
      (3) "Uncontrolled overflow" means the diversion of waste streams other than through a designed overflow device or structure, for example to overflowing manholes or overflowing into residences, commercial establishments, or industries that may be connected to a conveyance system.
   b. Prohibition of overflows. Overflows are prohibited unless:
      (1) Overflows were unavoidable to prevent an uncontrolled overflow, loss of life, personal injury, or severe property damage;
      (2) There were no feasible alternatives to the overflows, such as the use of auxiliary pumping or conveyance systems, or maximization of conveyance system storage; and
      (3) The overflows are the result of an upset as defined in General Condition B.4. and meeting all requirements of this condition.
   c. Uncontrolled overflows are prohibited where wastewater is likely to escape or be carried into the waters of the State by any means.
   d. Reporting required. Unless otherwise specified in writing by the Department, all overflows and uncontrolled overflows must be reported orally to the Department within 24 hours from the time the permittee becomes aware of the overflow. Reporting procedures are described in more detail in General Condition D.5.

7. Public Notification of Effluent Violation or Overflow
   If effluent limitations specified in this permit are exceeded or an overflow occurs, upon request by the Department, the permittee shall take such steps as are necessary to alert the public about the extent and nature of the discharge. Such steps may include, but are not limited to, posting of the river at access points and other places, news releases, and paid announcements on radio and television.

8. Removed Substances
   Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in such a manner as to prevent any pollutant from such materials from entering public waters, causing nuisance conditions, or creating a public health hazard.

SECTION C. MONITORING AND RECORDS

1. Inspection and Entry
   The permittee shall allow the Director, or an authorized representative upon the presentation of credentials to:
   a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
   b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
   c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, and
   d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by state law, any substances or parameters at any location.

SECTION D. REPORTING REQUIREMENTS

1. Planned Changes
   The permittee shall comply with Oregon Administrative Rules (OAR) 340, Division 52, "Review of Plans and Specifications". Except where exempted under OAR 340-52, no construction, installation, or modification involving disposal systems, treatment works, sewerage systems, or common sewers shall be commenced until
the plans and specifications are submitted to and approved by the Department. The permittee shall give notice to the Department as soon as possible of any planned physical alternations or additions to the permitted facility.

2. **Anticipated Noncompliance**
The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. **Transfers**
   This permit may be transferred to a new permittee provided the transferee acquires a property interest in the permitted activity and agrees in writing to fully comply with all the terms and conditions of the permit and the rules of the Commission. No permit shall be transferred to a third party without prior written approval from the Director. The permittee shall notify the Department when a transfer of property interest takes place.

4. **Compliance Schedule**
   Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date. Any reports of noncompliance shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements.

5. **Twenty-Four Hour Reporting**
The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally (by telephone) within 24 hours, unless otherwise specified in this permit, from the time the permittee becomes aware of the circumstances. During normal business hours, the Department's Regional office shall be called. Outside of normal business hours, the Department shall be contacted at 1-800-452-0311 (Oregon Emergency Response System).

A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. If the permittee is establishing an affirmative defense of upset or bypass to any offense under ORS 468.922 to 468.946, in which case if the original reporting notice was oral, delivered written notice must be made to the Department or other agency with regulatory jurisdiction within 4 (four) calendar days. The written submission shall contain:
   a. A description of the noncompliance and its cause;
   b. The period of noncompliance, including exact dates and times;
   c. The estimated time noncompliance is expected to continue if it has not been corrected;
   d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and
   e. Public notification steps taken, pursuant to General Condition B.7.

The following shall be included as information which must be reported within 24 hours under this paragraph:
   a. Any unanticipated bypass which exceeds any effluent limitation in this permit.
   b. Any upset which exceeds any effluent limitation in this permit.
   c. Violation of maximum daily discharge limitation for any of the pollutants listed by the Director in this permit.

The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

6. **Other Noncompliance**
The permittee shall report all instances of noncompliance not reported under General Condition D.4 or D.5, at the time monitoring reports are submitted. The reports shall contain:
   a. A description of the noncompliance and its cause;
   b. The period of noncompliance, including exact dates and times;
   c. The estimated time noncompliance is expected to continue if it has not been corrected; and
   d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

7. **Duty to Provide Information**
The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.

Other Information: When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Department, it shall promptly submit such facts or information.

8. **Signature Requirements**
All applications, reports or information submitted to the Department shall be signed and certified in accordance with 40 CFR 122.22.
9. Falsification of Reports
   Under ORS 468.953, any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, is subject to a Class C felony punishable by a fine not to exceed $100,000 per violation and up to 5 years in prison.

10. Changes to Indirect Dischargers - [Applicable to Publicly Owned Treatment Works (POTW) only]
   The permittee must provide adequate notice to the Department of the following:
   a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of the Clean Water Act if it were directly discharging those pollutants and;
   b. Any substantial change in the volume or character of pollutants being introduced into the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
   c. For the purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

11. Changes to Discharges of Toxic Pollutant - [Applicable to existing manufacturing, commercial, mining, and silvicultural dischargers only] The permittee must notify the Department as soon as they know or have reason to believe of the following:
   a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
      (1) One hundred micrograms per liter (100 µg/l);
      (2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
      (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
      (4) The level established by the Department in accordance with 40 CFR 122.44(f).
   b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
      (1) Five hundred micrograms per liter (500 µg/l);
      (2) One milligram per liter (1 mg/l) for antimony;
      (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
      (4) The level established by the Department in accordance with 40 CFR 122.44(f).

SECTION E. DEFINITIONS
1. BOD means five-day biochemical oxygen demand.
2. TSS means total suspended solids.
3. mg/l means milligrams per liter.
4. kg means kilograms.
5. m³/d means cubic meters per day.
6. MGD means million gallons per day.
7. Composite sample means a sample formed by collecting and mixing discrete samples taken periodically and based on time or flow.
8. FC means fecal coliform bacteria.
9. Technology based permit effluent limitations means technology-based treatment requirements as defined in 40 CFR 125.3, and concentration and mass load effluent limitations that are based on minimum design criteria specified in OAR 340-41.
10. CBOD means five day carbonaceous biochemical oxygen demand.
11. Grab sample means an individual discrete sample collected over a period of time not to exceed 15 minutes.
12. Quarter means January through March, April through June, July through September, or October through December.
13. Month means calendar month.
14. Week means a calendar week of Sunday through Saturday.
15. Total residual chlorine means combined chlorine forms plus free residual chlorine.
16. The term "bacteria" includes but is not limited to fecal coliform bacteria, total coliform bacteria, and E. coli bacteria.
17. POTW means a publicly owned treatment works.
Why Is the Phase II Storm Water Program Necessary?

Since the passage of the Clean Water Act (CWA), the quality of our Nation’s waters has improved dramatically. Despite this progress, however, degraded waterbodies still exist. According to the 1996 National Water Quality Inventory (Inventory), a biennial summary of State surveys of water quality, approximately 40 percent of surveyed U.S. waterbodies are still impaired by pollution and do not meet water quality standards. A leading source of this impairment is polluted runoff. In fact, according to the Inventory, 13 percent of impaired rivers, 21 percent of impaired lake acres and 45 percent of impaired estuaries are affected by urban/suburban storm water runoff and 6 percent of impaired rivers, 11 percent of impaired lake acres and 11 percent of impaired estuaries are affected by construction site discharges.

Phase I of the U.S. Environmental Protection Agency’s (EPA) storm water program was promulgated in 1990 under the CWA. Phase I relies on National Pollutant Discharge Elimination System (NPDES) permit coverage to address storm water runoff from: (1) “medium” and “large” municipal separate storm sewer systems (MS4s) generally serving populations of 100,000 or greater, (2) construction activity disturbing 5 acres of land or greater, and (3) ten categories of industrial activity.

The Storm Water Phase II Final Rule is the next step in EPA’s effort to preserve, protect, and improve the Nation’s water resources from polluted storm water runoff. The Phase II program expands the Phase I program by requiring additional operators of MS4s in urbanized areas and operators of small construction sites, through the use of NPDES permits, to implement programs and practices to control polluted storm water runoff. See Fact Sheets 2.0 and 3.0 for overviews of the Phase II programs for MS4s and construction activity.

Phase II is intended to further reduce adverse impacts to water quality and aquatic habitat by instituting the use of controls on the unregulated sources of storm water discharges that have the greatest likelihood of causing continued environmental degradation. The environmental problems associated with discharges from MS4s in urbanized areas and discharges resulting from construction activity are outlined below.

MS4s in Urbanized Areas

Storm water discharges from MS4s in urbanized areas are a concern because of the high concentration of pollutants found in these discharges. Concentrated development in urbanized areas substantially increases impervious surfaces, such as city streets, driveways, parking lots, and sidewalks, on which pollutants from concentrated human activities settle and remain until a storm event washes them into nearby storm drains. Common pollutants include pesticides, fertilizers, oils, salt, litter and other debris, and sediment. Another concern is the possible illicit connections of sanitary sewers, which can result in fecal coliform bacteria entering the storm sewer system. Storm water runoff picks up and transports these and other harmful pollutants then discharges them – untreated – to waterways via storm sewer systems. When left uncontrolled, these discharges can result in fish kills, the destruction of spawning and wildlife habitats, a loss in aesthetic value, and contamination of drinking water supplies and recreational waterways that can threaten public health.
**Construction Activity**

Uncontrolled runoff from construction sites is a water quality concern because of the devastating effects that sedimentation can have on local waterbodies, particularly small streams. Numerous studies have shown that the amount of sediment transported by storm water runoff from construction sites with no controls is significantly greater than from sites with controls. In addition to sediment, construction activities yield pollutants such as pesticides, petroleum products, construction chemicals, solvents, asphalts, and acids that can contaminate storm water runoff. During storms, construction sites may be the source of sediment-laden runoff, which can overwhelm a small stream channel’s capacity, resulting in streambed scour, streambank erosion, and destruction of near-stream vegetative cover. Where left uncontrolled, sediment-laden runoff has been shown to result in the loss of in-stream habitats for fish and other aquatic species, an increased difficulty in filtering drinking water, the loss of drinking water reservoir storage capacity, and negative impacts on the navigational capacity of waterways.

**Are Municipally Operated Sources Exempted by the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 Affected by the Final Rule?**

Provisions within ISTEA temporarily delayed the deadline for Phase I industrial activities (with the exception of power plants, airports, and uncontrolled sanitary landfills) operated by municipalities with populations of less than 100,000 people to obtain an NPDES storm water discharge permit. Congress delayed the permitting deadline for these facilities to allow small municipalities additional time to comply with NPDES requirements. The Phase II Final Rule ended this temporary exemption from permitting and set a deadline of no later than March 10, 2003 for all ISTEA-exempted municipally operated industrial activities to obtain permit coverage.

**How Was the Phase II Final Rule Developed?**

EPA developed the Phase II Final Rule during extensive consultations with a cross-section of interested stakeholders brought together on a subcommittee chartered under the Federal Advisory Committee Act, and with representatives of small entities participating in an advisory process mandated under the Small Business Regulatory Enforcement Fairness Act. In addition, EPA considered comments submitted by over 500 individuals and organizations during a 90-day public comment period on the proposed rule.

**Why Does Part of the Phase II Final Rule Use a Question and Answer Format?**

The provisions pertaining to operators of small MS4s are written in a “readable regulation” form that uses the “plain language” method. Questions and answers are used to create more reader-friendly and understandable regulations. The plain language method uses “must” instead of “shall” to indicate a requirement and words like “should,” “could,” or “encourage” to indicate a recommendation or guidance.

**Who Is Covered by the Phase II Final Rule?**

The final rule “automatically” covers two classes of storm water dischargers on a nationwide basis:

1. Operators of small MS4s located in “urbanized areas” as delineated by the Bureau of the Census. A “small” MS4 is any MS4 not already covered by Phase I of the NPDES storm water program. See Fact Sheets 2.1 and 2.2 for more information on small MS4 coverage.

2. Operators of small construction activities that disturb equal to or greater than 1 (one) and less than 5 (five) acres of land. See Fact Sheet 3.0 for more information on small construction activity coverage.

**Waivers**

Permitting authorities may waive “automatically designated” Phase II dischargers if the dischargers meet the necessary criteria. See Fact Sheets 2.1 (small MS4 waivers overview), 3.0 (construction waivers overview) and 3.1 (construction rainfall erosivity waiver) for details.

**Phased-in Permit Coverage**

Permitting authorities may phase-in permit coverage for small MS4s serving jurisdictions with a population under 10,000 on a schedule consistent with a State watershed permitting approach.

**Additional Designations by the Permitting Authority**

Small MS4s located outside of urbanized areas, construction activity disturbing less than 1 acre, and any other storm water discharges can be designated for coverage if the NPDES permitting authority or EPA determines that storm water controls are necessary. See Fact Sheet 2.1 for more information on the designation of small MS4s located outside of urbanized areas.
What Does the Phase II Final Rule Require?

Operators of Phase II-designated small MS4s and small construction activity are required to apply for NPDES permit coverage, most likely under a general rather than individual permit, and to implement storm water discharge management controls (known as “best management practices” (BMPs)). Specific requirements for each type of discharge are listed below.

**Small MS4s**

A regulated small MS4 operator must develop, implement, and enforce a storm water management program designed to reduce the discharge of pollutants from their MS4 to the “maximum extent practicable,” to protect water quality, and to satisfy the appropriate water quality requirements of the CWA. The rule assumes the use of narrative, rather than numeric, effluent limitations requiring implementation of BMPs.

- The small MS4 storm water management program must include the following six minimum control measures: public education and outreach; public participation/involvement; illicit discharge detection and elimination; construction site runoff control; post-construction runoff control; and pollution prevention/good housekeeping. See Fact Sheets 2.3 through 2.8 for more information on each measure, including BMPs and measurable goals.

- A regulated small MS4 operator must identify its selection of BMPs and measurable goals for each minimum measure in the permit application. The evaluation and assessment of those chosen BMPs and measurable goals must be included in periodic reports to the NPDES permitting authority. See Fact Sheet 2.9 for more information on permitting and reporting.

**Small Construction Activity**

- The specific requirements for storm water controls on small construction activity will be defined by the NPDES permitting authority on a State-by-State basis.

- EPA expects that the NPDES permitting authorities will use their existing Phase I general permits for large construction activity as a guide for their Phase II permits for small construction activity. If this occurs, a storm water pollution prevention plan will likely be required for small construction activity. See Fact Sheet 3.0 for more information on potential program requirements and appropriate BMPs for small construction activity.

What Is the Phase II Program Approach?

The Phase II program, based on the use of federally enforceable NPDES permits:

- Encourages the use of general permits;
- Provides flexibility for regulated operators to determine the most appropriate storm water controls;
- Allows for the recognition and inclusion of existing NPDES and non-NPDES storm water programs in Phase II permits;
- Includes public education and participation efforts as primary elements of the small MS4 program;
- Attempts to facilitate and promote watershed planning and to implement the storm water program on a watershed basis; and
- Works toward a unified and comprehensive NPDES storm water program with Phase I of the program.

How Does the Phase II Final Rule Address the Phase I Industrial “No Exposure” Provision?

In addition to establishing a deadline for ISTEA facilities and designating two new classes of dischargers, the Phase II Final Rule revises the “no exposure” provision originally included in the 1990 regulations for Phase I of the NPDES storm water program. The provision was remanded to EPA for further rulemaking and, subsequently, included in its revised form in the Phase II rule.

Under the Phase II Final Rule, a conditional no exposure exclusion is available to operators of all categories of Phase I regulated industrial activity (except category (x) construction activity) who can certify that all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. To obtain the no exposure exclusion, written certification must be submitted to the NPDES permitting authority. The final rule includes a No Exposure Certification form for use only by operators of industrial activity in areas where EPA is the NPDES permitting authority. See Fact Sheet 4.0 for more information on the conditional no exposure exclusion for industrial activity.
What Is the Phase II Program Implementation “Tool Box?”

EPA is committed to providing tools to facilitate implementation of the final Phase II storm water program in an effective and cost-efficient manner. The “tool box” will include the following components:

- Fact Sheets;
- Guidance Documents;
- Menu of BMPs;
- Information Clearinghouse/Web Site;
- Training and Outreach Efforts;
- Technical Research;
- Support for Demonstration Projects; and
- Compliance Monitoring/Assistance Tools.

A preliminary working toolbox is available on EPA’s website at [www.epa.gov/npdes/stormwater](http://www.epa.gov/npdes/stormwater). Three years after publication of the final rule, when the general permits are issued, a fully operational tool box is scheduled to be available.

What Is the Schedule for the Phase II Rule?

- The Phase II Final Rule was published in the *Federal Register* on December 8, 1999 (64 FR 68722).
- The Conditional No Exposure Exclusion option is available February 7, 2000, in States where EPA is the permitting authority.
- The NPDES permitting authority will issue general permits for Phase II-designated small MS4s and small construction activity by December 9, 2002.
- Operators of Phase II “automatically” designated regulated small MS4s and small construction activity must obtain permit coverage within 90 days of permit issuance.
- The NPDES permitting authority may phase-in coverage for small MS4s serving jurisdictions with a population under 10,000 on a schedule consistent with a State watershed permitting approach.
- Operators of regulated small MS4s must fully implement their storm water management programs by the end of the first permit term, typically a 5-year period.

For Additional Information

**Contacts**

- U.S. EPA Office of Wastewater Management
  - Internet: [www.epa.gov/npdes/stormwater](http://www.epa.gov/npdes/stormwater)
  - Phone: 202-564-9545

- Your NPDES Permitting Authority. A list of names and telephone numbers for each EPA Region and State is located at [www.epa.gov/npdes/stormwater](http://www.epa.gov/npdes/stormwater), then click on “Contacts.”

**Reference Documents**

- Storm Water Phase II Final Rule Fact Sheet Series
  - Internet: [https://www3.epa.gov/npdes/pubs/fact1-0.pdf](https://www3.epa.gov/npdes/pubs/fact1-0.pdf)

- Storm Water Phase II Final Rule (64 FR 68722)
September 26, 1994

Mr. Thomas D. Lulay, P. E.
Technical Services Managing
Engineer Oregon Department of
Transportation 200 transportation
Building
Salem, Oregon 97310

Dear Mr. Lulay:

Erosion and Sediment Control Final Rule

Enclosed is a Federal Register Final Rule regarding revisions to 23 CFR 650, Subpart B, Erosion and Sediment Control on Highway Construction Projects, and Mr. William Weseman’s September 2, 1994 transmittal memorandum. With the Final Rule, FHWA adopts the erosion control guidelines contained in the 1992 AASHTO Highway Drainage Guidelines, Volume III, "Erosion and Sediment Control in Highway Construction." These new guidelines deal with issues concerning the development and construction of projects with erosion control plans and, as such, will be of interest to the various units of the Oregon Department of Transportation involved in that type of work.

Mr. Weseman’s memorandum offers an interpretation and summary of the important issues brought about by the revisions. Please share this information with appropriate personnel. If you need additional information, I am available at 399-5749.

Sincerely yours,

Ivan Marrero
Programs Engineer

Enclosures

cc:
ODOT (W. Cobine, Operation) w/encl
(E. Engelmann, Envir w/encl
Memorandum

U.S. Department of Transportation
Federal Highway Administration

Subject: INFORMATION: Erosion and Sediment Control Final Rule

Date: SEP 2 1994

From: Director, Office of Engineering

Reply to: HNG-23

To: Regional Federal Highway Administrators
Division Administrators
Federal Lands Highway Program Administrator

On July 26, 1994, in Federal Register Volume 59, No. 142, 37935-37939, the Federal Highway Administration (FHWA) published a final rule revising 23 CFR 650, Subpart B, Erosion and Sediment Control on Highway Construction Projects. This revision formally adopts Volume III of the American Association of State Highway and Transportation Officials (AASHTO) Highway Drainage Guidelines 1992, as guidelines to be followed on all projects funded under Title 23, United States Code. The adoption of these guidelines fulfills the requirement of Section 1057 of the Intermodal Transportation Efficiency Act of 1991.

As part of this revision, a statement was included recommending that each State highway agency (SHA) apply either these guidelines, or their own more stringent guidelines, to develop specific standards and practices for the control of erosion. These specific standards and practices may reference available resources, such as the procedures presented in the AASHTO Model Drainage Manual, 1991.

One copy of the AASHTO Highway Drainage Guidelines is being provided to each region, division and Federal Lands office. However, due to cost considerations, the AASHTO Model Drainage Manual is being transmitted to the region offices only. The final rule as it was published in the Federal Register is attached for your information.

The FHWA is committed to ensuring that all highway construction projects are located, designed, constructed and maintained according to standards that will minimize erosion and control associated sedimentation. Volume III of the AASHTO Highway Drainage Guidelines provides excellent guidance concerning these factors. The following is a summary of some of the important issues.

- This regulation and the accompanying guidelines apply to all projects funded under 23 U.S.C. This includes projects on or off the National Highway System.
• Erosion and sediment control plans shall be included in the PS&E for all applicable projects, not just larger or more complex projects. It is no longer satisfactory to specify that the contractor is responsible for all damages resulting from the construction operation or to leave the development of erosion and sediment control plans to the contractor or to project personnel after the project has been awarded.

• Erosion and sediment control plans shall be developed by qualified personnel. This would normally be a hydraulic engineer.

• As a minimum, erosion and sediment control plans should identify erosion and sediment sensitive areas and provide a mechanism for minimizing any adverse effects. It is not acceptable to provide a bid item for various erosion and sediment control items without including a corresponding plan indicating how and where these items shall be placed.

• During construction, erosion and sediment control plans should be periodically evaluated to assess the effectiveness of the implemented management practices. Erosion and sediment control plans should be revised and updated as needed to ensure that the intended purpose is achieved.

• For those States participating in the coastal zone management program, the SHA should be utilizing the Environmental Protection Agency document "Guidance Specifying Management Measures for Sources of Nonpoint Source Pollution in Coastal Waters" to control erosion and sedimentation on highway construction projects located in coastal zone management areas. While it would be advantageous to be aware of your State's involvement in the coastal zone management program, no effort beyond FHWA's normal activities will be required to implement or monitor the requirements of this program.

The FHWA Eastern Federal Lands Highway Division is developing a manual entitled, "Best Management Practices For Erosion and Sediment Control." This document will provide design and implementation guidance on specific erosion and sediment control management practices and procedures. It is expected that this document will be available by the end of the year. In addition, if sufficient SHA interest is indicated, an erosion and sediment control training course may be developed. If you have any questions or require further information contact Mr. Robin L. Schroeder, Construction and Maintenance Division, Materials Branch (HNG-23) at 202-366-1577.

William A. Weseman

Attachment
DATE: Tuesday, July 26, 1994

ACTION: Final rulee

[*37935]

SUMMARY: Section 1057 of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) requires the Secretary of Transportation to develop erosion control guidelines for States to follow when carrying out Federal-aid construction projects. Pursuant to this authority, the existing erosion and sediment control regulation, issued in 1974, is being updated and modified by the FHWA to reflect current state-of-the-art practices and management techniques. To fulfill the requirements of section 1057, the FHWA is adopting, as guidelines, the American Association of State Highway and Transportation Officials (AASHTO) publication Highway Drainage Guidelines, Volume III, "Erosion and Sediment Control in Highway Construction," 1992e. The updated regulation includes a statement recommending that each State highway agency (SHA) apply these guidelines, or their own more stringent guidelines, to develop specific standards and practices for the control of erosion.

EFFECTIVE DATE: July 26, 1994e

FOR FURTHER INFORMATION CONTACT: Mre Robin L. Schroeder, Office of Engineering, HNG-23e 202-366-1577; or Mre Robert J. Black, Office of the Chief Counsel, HCC-31, 202-366-1359; Federal Highway administration, 400 Seventh Street, SW., Washington D.C. 20590e. Office hours are 7:45 a.m. to 4:15 p.m. e.t.e Monday through Friday, except legal Federal holidayse.
SUPPLEMENTARY INFORMATION:

Background

Section 1057 of the ISTEA (Pub. L. 102-240, 105 Stat. 1914, 2002) requires the Secretary to develop erosion control guidelines for the States to follow in carrying out federally funded construction projects. It requires that these guidelines not preempt any requirement under State law if such requirement is more stringent than the guidelines. It also requires that these guidelines be consistent with nonpoint source management programs under section 319 of the Federal Water Pollution Control Act (33 U.S.C. 1339) and coastal nonpoint pollution control guidance under section 6217(e) of the Coastal Zone Act Reauthorization Amendments of 1990 codified at 16 U.S.C. § 1455b (Pub. L. 101-508, 104 Stat. 1388-299, as amended) (Coastal Zone Act).


To satisfy this requirement the FHWA is adopting, as guidance, the AASHTO publication Highway Drainage Guidelines, Volume III, "Erosion and Sediment Control in Highway Construction," 1992. Other minor editorial changes to 23 CFR 650 were also made to correct typographical errors and to change the wording to reflect current practice. A notice of proposed rulemaking (NPRM) proposing to revise 23 CFR 650, subpart B to reference this AASHTO publication was published in the Federal Register on March 1, 1993, at 58 FR 11814.

Comments To Docket

Nine comments were submitted to the docket. Eight comments were received from SHA's and one comment from a Federal Government agency. The following is a summary of the comments and the FHWA responses:

Supportive of Change

The North Carolina Department of Transportation (DOT) supported FHWA's proposal to adopt the AASHTO guidelines.

The Connecticut Department of Transportation submitted a letter stating that they had no comment concerning the guidelines.

Existing Guidelines More Stringent

The California Department of Transportation (CALTRANS) did not object to the changes to 23 CFR 650 subpart B. CALTRANS stated that it has adopted requirements and guidelines for erosion control on construction projects that are equal to or more stringent than the guidelines set forth in the AASHTO publication.
National Pollutant Discharge Elimination System (NPDES) Requirements

The Hawaii Department of Transportation stated that the FHWA should adopt the AASHTO publication. It suggested, though, that the final rule reference the NPDES permit requirements in 23 CFR 650. The NPDES permits are issued under the authority of the Environmental Protection Agency (EPA) in compliance with the provisions of the Federal Water Pollution Control Act (FWPCA) (33 U.S.C. 1251 et seq. as amended by Pub. L. 92-500).

The FHWA does not believe that it is necessary to specifically reference NPDES permit requirements in 23 CFR 650. There is a statement in 23 CFR 650.207(b) that the FHWA shall take all reasonable steps to insure that all project designs for control of erosion and sedimentation comply with applicable standards and regulations of other agencies. This would include the NPDES permit requirements as well as any other State or local regulations concerning the control of erosion and sedimentation.

Guidelines


The Nebraska Department of Roads (NDOR) questioned the use of a hydraulic engineer in the design and review of diversion dikes and ditches, and temporary slope drainages. The NDOR believed that normal roadway design engineers would be adequate for most hydraulic designse. Hydraulic engineers, the NDOR argued, could be used for the design and review of complex sediment and erosion control systems.

While the FHWA agrees that a roadway design engineer may be capable of conducting an adequate hydraulic design, it is important that erosion and sediment control structures are designed properly. These structures should be sized and located based on flows resulting from the design year storm. Proper design of the project requires a working knowledge of hydraulic engineering. While it is not required that a hydraulic engineer conduct the design and review of the erosion and sediment control structures, the design must be conducted by someone competent in hydraulic design procedures. While the FHWA does not agree with the NDOR suggestion that the reference to a hydraulic engineer be removed from the guidance, it does agree that a person who is competent in hydraulic design could adequately fulfill the intent of the guidelines.

The Arkansas State Highway Department had no reservations about adopting the AASHTO guidelines, but suggested that a summary be added indicating that the level of effort dedicated to the planning of a project and the development of the erosion control plan be commensurate with size and complexity of projects. While the FHWA agrees that more complex projects or projects that may affect sensitive ecosystems such as wetlands, streams, rivers, or other water bodies will include detailed erosion and sediment control plans, every project should be planned, located, designed, and constructed with the intent of limiting the projects' effects on the environment. Though projects may differ in the type and extent of the mitigation measures and practices that are
implemented, the level of effort put forth to limit the environmental effects for smaller, less complex projects should be equal to that put forth on larger, more complex ones.

The Georgia Department of Transportation (GDOT) found the AASHTO document acceptable but had the following minor comments: The GDOT argued that detailed erosion and sediment control plans should not be required as part of the contract document in order to allow the contractor the necessary flexibility to develop a site and operation-specific plans. Instead, the GDOT argued that the contract plans should include any extremely sensitive areas such as lakes, wetlands, and streams, and sufficient quantities of erosion control devices should be provided as a bid item to mitigate possible erosion and sedimentation effects. According to the GDOT, this would allow the contractor and the project engineer the flexibility to customize the erosion control measures employed to the contractor's approach to the work.

While the FHWA agrees erosion and sediment control plans should be flexible, both contractors and contracting agencies should be fully aware of the possible environmental effects of their projects. Therefore, all potential environmental impacts associated with erosion and sedimentation, not just those affecting sensitive areas, and the measures and practices required to mitigate these impacts should be included in the plans, specifications, and special provisions. As previously mentioned, the effectiveness of many erosion and sediment control measures is dependent upon proper design and installation.

The FHWA believes it is inappropriate to delegate responsibility for the planning and design of erosion and sediment control measures to the contractor or the project engineer, who may or may not have sufficient design expertise in this area. However, erosion and sediment control plans should be flexible enough to properly fulfill their intended purposes. Accordingly, each erosion and sediment control plan should be periodically evaluated to ensure that all necessary controls are being implemented correctly and that unnecessary or improperly installed controls are eliminated or revised. Additions, deletions, or revisions to the erosion and sediment control plan should be reviewed by a person competent in erosion and sediment control design.

The GDOT and the Michigan Department of Transportation had minor technical comments on specific design details contained in the AASHTO publication. While the FHWA may agree with some of these design-related comments, the agency emphasizes that the AASHTO publication is intended to provide guidance on the development and implementation of erosion and sediment control measures and practices. The design details that are included are provided as a basis for the development of more detailed project-specific designs. Each State should apply the AASHTO guidelines or its own guidelines, if those guidelines are more stringent, to develop standards and practices for the control of erosion and sedimentation on Federal-aid construction projects.

Although the AASHTO guidelines can be used for the development of a statewide implementation program for controlling erosion and sedimentation, each project [*37937] must be analyzed separately to assure that the most appropriate and effective erosion and sediment control measures and practices are designed, implemented, and maintained.

Pages 37935 - 37940
Revisions to Part 650

A comment concerning the revisions to Part 650 was made by the EPA's Office of Wetlands, Oceans and Watershed. Although the EPA supported the regulatory changes proposed in the NPRM, it had two specific comments. Both concerned the requirement of the ISTEA that FHWA erosion control guidelines be consistent with nonpoint source management programs under section 319 of the FWPCA and coastal nonpoint pollution control guidance issued by the EPA in January 1993, under section 6217(g) of the Coastal Zone Act of 1990.

Request to Add a New Paragraph

The EPA proposed that the FHWA add a specific paragraph to 23 CFR Part 650 that would quote a management measure contained in the section 6217(g) management measure guidance document (see footnote # 1). The management measure at issue is in Chapter 4.IIeA. "New Development Management Measure," and concerns reducing the amount of total suspended solids (TSS) leaving the site after construction has been completed and the site is permanently stabilized. It allows for two options to accomplish this goal. Under the first option, after construction, the average amount of TSS (including sediment) leaving the project site would be reduced by 80 percent. The second option would limit the post-development discharge of suspended solids to an amount equal to or less than pre-development conditions.

Guidance under section 6217(g) specifies management measures for a wide range of pollutant sources. These include agricultural, forestry, urban area, and marine and recreational boating sources. The management measure cited by the EPA is found under Chapter 4: "Management Measures for Urban Areas," and specifically under Section II, "Urban Runoff." It is intended to be applied by States in areas within the designated coastal zone, under the authority of the Coastal Zone Management Act of 1972 (Pub. L. 92-583, 86 Stat. 1280, as amended), to control urban runoff and treat associated pollutants from new development, redevelopment, and new and relocated roads, highways, and bridges.

This management measure deals with the post construction control of erosion and sedimentation. It applies to the reduction of TSS after the project has been fully stabilized. However, during several meetings between the EPA and the FHWA, the EPA emphasized that this reduction can be accomplished through design or by performance. In other words, projects should be designed, using the best available technology, with the intent of reducing or limiting TSS by the specified amount. The intent was not to require the actual measurement of the TSS leaving the project site either before or after construction but to establish guidance relative to project design standards.

The section 6217(g) guidance does not apply to storm water discharges covered by the NPDES storm water permit program. This includes all highway construction projects disturbing five or more acres of land. In addition, the section 6217(g) guidance does not apply to States without coastal zone management programs approved by the United States Department of Commerce.
The ability to limit or reduce the amount of TSS leaving a specific site will depend on the type of best management practice (BMP) selected. Each BMP has its own strengths and weaknesses, and no one BMP will be applicable to every situation. The effectiveness of the selected BMP can also be highly variable. For example, wet ponds, which are one of the most reliable and attractive BMPs that exist, have a reported sediment removal rate of between 50 to 90 percent. Extended detention ponds, or dry ponds, on the other hand, have a sediment removal efficiency of only 30 to 70 percent. Both of these BMPs may need to be supplemented by other controls to conform with the 6217(dg) guidance.


Key design factors in determining the effectiveness of particular BMPs include size, configuration, retention time and long term maintenance. The effectiveness of a particular BMP is influenced by a variety of locational factors as well. For example, problems will be encountered if wet ponds are located in areas experiencing long periods of dry weather and/or high evaporation rates, or long periods of cold weather when the pond is frozen. In any case, many aspects related to BMP performance are not well understood and all BMP options will require careful site assessment prior to design.

The provisions of 23 CFR part 650, subpart B, deal with erosion and sediment control for all federally funded construction projects nationwide. Their objectives are to control erosion and sedimentation during the construction of highway projects and to assure that highway projects are located, designed, and operated to minimize erosion and sediment damage. The AASHTO guidelines that are being proposed for adoption as guidance include three objectives for erosion and sediment control. These objectives are:

1. Limit off-site effects to acceptable levels,
2. Facilitate project construction and minimize overall cost, and

As stated in the first objective, an intent of these guidelines is not to establish specific design standards but to limit off-site effects to acceptable levels. The determination of what constitutes an undesirable effect is not specified. The intent is to assess possible adverse off-site effects and to implement BMPs as appropriate to minimize these effects.

The FHWA agrees with the EPA that a goal of any highway construction project would be to limit the amount of erosion and resulting sedimentation attributable to that project. The FHWA also recognizes that within the coastal zone there may be water bodies that are extremely sensitive to the deposition of sedimentation. However, the FHWA believes that it is inappropriate to set specific design standards for all projects nationwide. The FHWA is amending 23 CFR part 650 to add § 650.211 which provides that projects located within coastal zone management areas, as specified by States with coastal zone management...
programs approved by the United States Department of Commerce, National Oceanic and Atmospheric Administration, utilize "Guidance Specifying Management Measures for Sources of Nonpoint Source Pollution in Coastal Waters."

Request to Incorporate Additional Guidance

The EPA also requested that the FHWA add a new paragraph to Part 650 that incorporates, by reference, certain portions of the section 6217(g) guidancee. These other management measures, found under Chapter 4.VIII, "Roads, Highways, and Bridges," would include management measures in the areas of planning, siting, and developing roads and highways; bridges; construction projects; construction site chemical control; operation and maintenance; and road, highway, and bridge runoff systems.

Section 1057 of the ISTEA requires that the guidelines that are developed be [*37938] consistent with the section 6217(g) guidancee. The AASHTO guidelines that the FHWA is now adopting deal primarily with erosion and sediment control during construction. However, the guidelines also state that, "While much of the effort for control of erosion and sedimentation is expended during the construction phase of highway development, a successful program must address erosion and sediment control during the planning, location, design, and future maintenance phases as welle." The AASHTO guidelines provide comprehensive guidance concerning the establishment of criteria and controls for erosion and sedimentation. These guidelines provide detailed information that addresses and is consistent with the pertinent sections of the section 6217(g) guidancee.

However, as previously stated, the FHWA is amending 23 CFR Part 650 to add § 650.211 which provides that highway construction projects covered under the provisions of the section 6217(g) guidance should utilize "Guidance Specifying Management Measures for Sources of Nonpoint Source Pollution in Coastal Waters."

Additional Revisions

The language of § 650.209(c) dealing with monitoring erosion and sediment control measures and practices, has been revised from that proposed in the NPRMe. As set forth in the NPRM, this section implied that if a problem in the effectiveness of the erosion and sediment control measure is indicated, revision of that measure would be required. The intent of this section is to ensure that erosion and sediment control measures are periodically reviewed to assure their effectiveness. This would include maintenance of the existing measures as well as revising those measures that are found to be less than fully effective. The language of § 650.209(c) has been revised to clarify this issue.

Rulemaking Analyses and Notices

Administrative Procedure Act

This final rule is made effective upon publicatione. The FHWA believes that this final rule is exempt from the 30-day delayed effective date requirement of 5 U.S.C. § 553(d) for the following
reasone The FHWA finds that good cause exists to dispense with the 30-day delay because an earlier version of the AASHTO erosion and sediment control publication adopted by this action has already been adopted, as guidance "to provide valuable information in attaining good design in highway construction projects. See 23 CFR 625.5. This final rule simply amends title 23, Code of Federal Regulations, to reference the updated AASHTO guidelines on this subject and it includes this reference under 23 CFR part 650, which specifically addresses erosion and sediment control on highway construction projects. Therefore, this final rule imposes no new requirements or mandates on State highway agencies. Instead, it simply cites the revised AASHTO guidelines with the aim of assisting States in assuring that highway projects are located, designed, and operated to minimize erosion and sediment damage.

Executive Order 12866 (Regulatory Planning and Review) and DOT Regulatory Policies and Procedures

The FHWA has determined that this action is not a significant regulatory action within the meaning of Executive Order 12866 or significant within the meaning of Department of Transportation regulatory policies and procedures. The FHWA (at 23 CFR 650 Subpart B) and other Federal agencies currently have regulations regarding erosion and sediment control. Adopting the AASHTO guidelines would merely update and reinforce existing policy. Therefore, it is anticipated that the economic impact of this rulemaking will be minimal and a full regulatory evaluation is not required.

Regulatory Flexibility Act

In compliance with the Regulatory Flexibility Act (5 U.S.C. 601-612), the FHWA has evaluated the effects of this rule on small entities. The FHWA concluded that it and other Federal agencies currently have regulations dealing with erosion and sediment control and adopting the 1992 AASHTO guidelines would merely reinforce existing policy. Therefore, the FHWA hereby certifies that this rulemaking will not have a significant economic impact on a substantial number of small entities.

Executive Order 12612 (Federalism Assessment)

This action has been analyzed in accordance with the principles and criteria contained in Executive Order 12612, and it has been determined that this action would not have sufficient federalism implications to warrant the preparation of a federalism assessment.

Executive Order 12372 (Intergovernmental Review)

Catalog of Federal Domestic Assistance Program Number 20.205, Highway Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities apply to this program.

Paperwork Reduction Act

This action does not contain a collection of information requirement for purposes of the Paperwork Reduction Act of 1980, 44 U.S.C. 3501-3520.
National Environmental Policy Act

This rulemaking will provide guidance to State Highway Agencies when implementing or developing erosion and sediment control guidelines. This will aid in the control and prevention of nonpoint source pollutants. It does not constitute a major action having a significant effect on the environment, and therefore does not require the preparation of an environmental impact statement pursuant to the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

Regulation Identification Number

A regulation identification number (RIN) is assigned to each regulatory action listed in the Unified Agenda of Federal Regulation. The Regulatory Information Service Center publishes the Unified Agenda in April and October of each year. The RIN contained in the heading of this document can be used to cross reference this action with the Unified Agendas.

List of Subjects in 23 CFR Part 650

Grant programs—transportation, Highways and roads, Soil conservation

In consideration of the foregoing, the FHWA is amending title 23, Code of Federal Regulations, part 650, subpart B as set forth below.

Issued on: July 18, 1994.

Rodney E. Slater,
Federal Highway Administrator

PART 650—BRIDGES, STRUCTURES, AND HYDRAULICS [AMENDED]

1. The authority for part 650 is revised to read as follows:


Subpart B—Erosion and Sediment Control on Highway Construction Projects

2. Part 650 is amended by revising §§ 650.201, 650.203, 650.205 and 650.209 and by adding § 650.211 to read as follows: § 650.201 — Purpose

The purpose of this subpart is to prescribe policies and procedures for the control of erosion, abatement of water pollution, and prevention of damage by sediment deposition from all construction projects funded under title 23, United States Code. § 650.203 — Policy.
It is the policy of the Federal Highway Administration (FHWA) that all highways funded in whole or in part under title 23 of the United States Code, shall be located, designed, constructed and operated according to standards that will minimize erosion and sediment damage to the highway and adjacent properties and abate pollution of surface and ground water resources. Guidance for the development of standards used to minimize erosion and sediment damage is referenced in § 650.211 of this part.

§ 650.205 -- Definitions

Erosion control measures and practices are actions that are taken to inhibit the dislodging and transporting of soil particles by water or wind, including actions that limit the area of exposed soil and minimize the time the soil is exposed.

Permanent erosion and sediment control measures and practices are installations and design features of a construction project which remain in place and in service after completion of the project.

Pollutants are substances, including sediment, which cause deterioration of water quality when added to surface or ground waters in sufficient quantity.

Sediment control measures and practices are actions taken to control the deposition of sediments resulting from surface runoff.

Temporary erosion and sediment control measures and practices are actions taken on an interim basis during construction to minimize the disturbance, transportation, and unwanted deposition of sediments.

§ 650.209 -- Construction

(a) Permanent erosion and sediment control measures and practices shall be established and implemented at the earliest practicable time consistent with good construction and management practices.

(b) Implementation of temporary erosion and sediment control measures and practices shall be coordinated with permanent measures to assure economical, effective, and continuous control throughout construction.

(c) Erosion and sediment control measures and practices shall be monitored and maintained or revised to insure that they are fulfilling their intended function during the construction of the project.

(d) Federal-aid funds shall not be used in erosion and sediment control actions made necessary because of contractor oversight, carelessness, or failure to implement sufficient control measures.

(e) Pollutants used during highway construction or operation and material from sediment traps shall not be stockpiled or disposed of in a manner which makes them susceptible to being washed into any watercourse by runoff or high water. No pollutants shall be deposited or disposed of in watercourses.

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§ 650.211 -- Guidelines

(a) The FHWA adopts the AASHTO Highway Drainage Guidelines, Volume III, "Erosion and Sediment Control in Highway Construction," 1992, as guidelines to be followed on all construction projects funded under title 23, United States Code. These guidelines are not intended to preempt any requirements made by or under State law if such requirements are more stringent.

This document is available for inspection from the FHWA headquarters and field offices as prescribed by 49 CFR part 7, appendix D. It may be purchased from the American Association of State Highway and Transportation Officials offices at Suite 225, 444 North Capitol Street, NW, Washington, DC 20001.

(b) Each State highway agency should apply the guidelines referenced in paragraph (a) of this section or apply its own guidelines, if these guidelines are more stringent, to develop standards and practices for the control of erosion and sediment on Federal-aid construction projects. These specific standards and practices may reference available resources, such as the procedures presented in the AASHTO "Model Drainage Manual," 1991.

This document is available for inspection from the FHWA headquarters and field offices as prescribed by 49 CFR part 7, appendix D. It may be purchased from the American Association of State Highway and Transportation Officials offices at Suite 225, 444 North Capitol Street, NW, Washington, DC 20001.

(c) Consistent with the requirements of section 6217(g) of the Coastal Zone Act Reauthorization Amendments of 1990 (Pub. L. 101-508, 104 Stat. 1388-299), highway construction projects funded under title 23, United States Code, and located in the coastal zone management areas of States with coastal zone management programs approved by the United States Department of Commerce, National Oceanic and Atmospheric Administration, should utilize "Guidance Specifying Management Measures for Sources of Nonpoint Source Pollution in Coastal Waters," 84-B-92-002, U.S. EPA, January 1993. State highway agencies should refer to this Environmental Protection Agency guidance document for the design of projects within coastal zone management areas.

This document is available for inspection and copying as prescribed by 49 CFR part 7, appendix D.

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