

**2009 EROSION AND SEDIMENT CONTROL  
DESIGN AND CONSTRUCTION MANUAL**

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

**MINUTE ORDER**

Statewide

Page 1 of 1 Pages

**WHEREAS**, on October 1, 1992, the National Pollutant Discharge Elimination System Permit was issued by the Arkansas Department of Pollution Control and Ecology to authorize the discharge of storm water from construction sites; and

**WHEREAS**, the Department is required by law to comply with the Permit conditions; and

**WHEREAS**, to comply with the Permit conditions, an Erosion and Sediment Control Design and Construction Manual has been written to assist designers in developing proper plans and to provide inspectors with standard procedures to follow; and

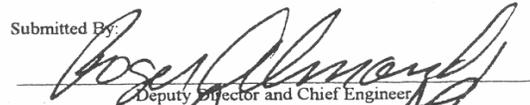
**WHEREAS**, the Manual will be used by other State and Federal agencies to monitor Department compliance with the Permit conditions:

**NOW THEREFORE**, the June 1, 1994 edition of the Manual and future revisions are adopted as Department guidelines in the control of erosion and sedimentation.

Approved:

  
Chairman  
  
Vice-Chairman  
  
Member  
  
Member  
  
Member

Submitted By:

  
Deputy Director and Chief Engineer

Approved:

  
Director

Minute No.

94 209

Date Passed

JUN 1 1994

Form D-456

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# 2009 EROSION AND SEDIMENT CONTROL DESIGN AND CONSTRUCTION MANUAL

## PREFACE

Soil erosion is a natural process whereby soil particles are dislodged by rainfall and carried away by runoff. The removal rate of the soil particles is proportional to the intensity and duration of the rainfall, the volume and characteristics of the water flow, the terrain characteristics and soil properties. This erosion process is accelerated where removal of the vegetative or other natural protective cover of the soil has disturbed the land.

Sedimentation is the natural process of deposition of the eroded soil. This eroded soil in the form of sediment may modify the characteristics of lakes, streams, and reservoirs, restrict drainage, plug culverts, affect adjacent properties, and affect the ecosystems of streams.

The National Pollutant Discharge Elimination System (NPDES) was established for regulation of sediment and other pollutants that may enter the waters of the United States. The U.S. Environmental Protection Agency (EPA), the U.S. Army Corp of Engineers, and the Arkansas Department of Environmental Quality (ADEQ) administer the requirements of the NPDES Program.

Phase II of the NPDES Program became effective March 1, 2003. As a result of this, ADEQ issues a NPDES General Construction Permit that is applicable to all construction sites in Arkansas.

A complete copy of the NPDES General Construction Permit is included in the Appendix C of this Manual. The NPDES General Construction Permit is the "source document". All of it should be read and understood by design and field personnel.

Highway maintenance and construction activities are considered "construction projects" under the NPDES General Construction Permit. This applies to projects undertaken by Department forces or Contractors, which meet the size and scope to require permitting.

In order to comply with the NPDES General Construction Permit when undertaking highway maintenance and construction activities, a Storm Water Pollution Prevention Plan (SWPPP) must be developed and implemented to manage storm water runoff from construction projects to achieve an acceptable level of erosion and sediment control.

Department policy is to install appropriate erosion and sediment control devices for all construction activities as needed without regard to the area of disturbed land.

The Department will authorize installation and maintenance of appropriate erosion control items on projects that do not require a formal SWPPP with the same care and judgment used on projects on which the acreage disturbed requires NPDES permitting. The Department will include necessary pay items in all contracts to accommodate

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erosion control.

Development and design of the SWPPP may be the responsibility of Roadway Design Division, State Aid Division, Maintenance Division, or the District, depending on the type of activity involved.

Implementation of the SWPPP is the responsibility of field personnel assigned to administer the project. These are normally construction and maintenance personnel in the District.

This Manual is intended to provide guidelines and procedures to assist the designer in the development of a SWPPP and to assist field personnel in implementing the SWPPP.

Electronic versions of this Manual, related documents, and related forms may be downloaded from the Construction Division subdirectory on the Local Area Network (LAN).

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## 1.0 WATER RELATED CONCERNS

The basic goal of storm water management is simple: improve water quality by reducing pollutants in storm water discharges.

The Clean Water Act of 1972, as amended, addresses various issues related to improving water quality and requires that programs be established for permitting activities that may impact this effort. Various agencies in Arkansas have oversight of these programs, chiefly the U.S. Army Corp of Engineers, the U.S. Environmental Protection Agency (EPA), and the Arkansas Department of Environmental Quality (ADEQ).

General guidance regarding standard conditions for protection of water quality is found in Standard Specifications, Supplemental Specifications, and Special Provisions. Specific guidance pertaining to each project will be found in the Special Provisions of the Contract. These may include special provisions for storm water pollution prevention, Section 404 Permits, protection of public drinking water surface water intakes or wellhead protection areas, and endangered species protection.

Within Arkansas, certain water bodies and areas are designated for special protection. Waterbody designations that affect Department construction and maintenance activities and need to be considered within the erosion and sediment control plans are:

**Extraordinary Resource Waters (ERW).** These waters have a combination of chemical, physical and/or biological characteristics that are expressed in terms of outstanding scenic beauty, aesthetics, scientific value, broad scope recreation potential, and intangible social values.

**Ecologically Sensitive Waterbodies (ESW).** These are special aquatic areas known to provide habitat for threatened, endangered or sensitive species of aquatic or semi-aquatic plants or animals.

**Natural and Scenic Rivers (NSR).** Federal and state legislation creates extra protection for some rivers that have been selected as having special natural, scenic or recreational qualities.

**Impaired Waters.** The ADEQ is required by the Clean Water Act to prepare a list of waters in Arkansas that are considered overly "impaired" (polluted). These waters are cataloged on ADEQ's 303(d) List and targeted for clean-up. Some of these waters are listed because they contain too much turbidity, sediment, and/or grease and can become further impaired by construction or maintenance activities.

**Public Water Supply (PWS).** The Arkansas Department of Health oversees regulations related to public drinking water. Many public drinking water intakes and wellhead protection areas are found across the state.

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Unless specifically requested by ADEQ, the Department is not required to submit a Storm Water Pollution Prevention Plan (SWPPP) for Automatic Coverage Site projects discharging to Extraordinary Resource Waters (ERW), Ecologically Sensitive Waterbodies (ESW), waters with established Total Maximum Daily Loads (TMDLs), or waters of the 303(d) List which are impaired for turbidity and/or oil and grease. This is not a waiver from the requirement to protect these water bodies and those involved in designing and/or implementing the SWPPP should use the same care to insure the water bodies are protected from sediment runoff as would be used with Large Construction Sites.

Programs affecting Department construction and maintenance activities that are related to water quality are briefly discussed below. For further information about any of these programs, contact the Environmental Division.

### 1.1 NPDES GENERAL CONSTRUCTION PERMIT

Generally, a NPDES discharge permit is required for all construction sites that will result in the disturbance, by activities such as clearing, grading, or excavating, of one acre or more.

Sites for highway maintenance activities require a permit if one or more acres of underlying and/or surrounding soil are cleared, graded, or excavated as part of the operation.

Projects providing for the restoration or re-establishment of the constructed line, grade and typical section of the roadway will normally be considered maintenance activity by ADEQ and should not require a permit.

Routine maintenance activities on existing roads where the line and grade of the road is not being altered, such as with gravel road grading, shoulder and slope restoration, and adjacent ditch maintenance, do not require a permit. Also, when work involves only paving of the existing road a permit is not required.

If uncertain that a permit is required, the designer (Roadway Design Division, Bridge Division, State Aid Division, Maintenance Division, or the District) should contact the NPDES Section of the Environmental Division for guidance.

Construction activities not considered to be routine maintenance are divided into two types based on the size of the site.

**AUTOMATIC COVERAGE (SMALL CONSTRUCTION) SITES:** Automatic Coverage applies to any construction activity that will disturb/expose a total of one acre or more but less than five acres, or less than one acre if it is part of a larger site that will ultimately disturb/expose one acre or more. The field requirements for a “small construction site” project receiving automatic coverage are generally the same as those

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for large construction sites except that ADEQ does not require submission of the SWPPP, the Notice of Intent (NOI), and the Notice of Termination (NOT) unless specifically requested.

**LARGE CONSTRUCTION SITES:** A project meeting the definition of a “large construction site” is any construction activity that will disturb/expose a total of five acres or more. For these sites, a SWPPP must be prepared and submitted to ADEQ with a NOI. A Notice of Coverage will be issued by ADEQ. A NOT must be submitted to ADEQ when the project is stabilized.

Both of these site sizes have the following basic requirements for the SWPPP:

- A SWPPP must be developed in accordance with this Manual.
- The SWPPP must be implemented in accordance with this Manual. This includes, but is not limited to, maintaining detailed documentation of the plan, the inspection form and correction efforts, and the implementation efforts of the Department, and making these available to ADEQ and/or EPA personnel and others when requested.
- A copy of the entire SWPPP must be maintained on the project site.
- The status of erosion control devices (ECD's) installed on a project must be current for ADEQ and/or EPA review. An up-to-date set of plans is maintained on the project site with the installed devices noted.

### 1.2 SECTION 404 PERMITS

Section 404 of the Clean Water Act established a permitting program to control discharge of dredged or fill material into waters of the United States. These waters include lakes, rivers, streams (including intermittent streams), mud flats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, natural ponds, and impoundments of waters otherwise defined as waters of the United States. Sewage lagoons, water treatment systems, and farm reservoirs are not considered waters of the United States.

If proposed work is within a waterbody, Section 404 permits, water quality certification, and Short Term Activity Authorization (STAA) must be obtained. A project location map (plan title sheet), design data regarding the scope of the proposed project or change order, and a conceptual plan are required for these permits.

The general conditions for issuance of a Section 404 Permit (regardless of type) include:

- **Prior Water Quality Certification.** A state water quality certification must be obtained,
- **Proper maintenance.** Any structure or fill authorized shall be of correct material, properly maintained, including maintenance to ensure public safety, and;
- **Erosion and siltation controls.** Appropriate erosion and siltation controls must

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be used and maintained in effective operating condition during construction, and all exposed soil and other fills must be permanently stabilized at the earliest practicable date.

Proposed construction and maintenance activities and changes to on-going activities involving waterbodies or wetlands must be coordinated with the Special Studies Section of the Environmental Division.

### **1.3 WATER QUALITY CERTIFICATION**

State Water Quality Certification requires reasonable assurance that the project will be constructed in a manner that will not physically alter a significant segment of a water body and will not violate ADEQ water quality standards. In Arkansas, water quality certification pursuant to Section 401 of the Clean Water Act, or waiver thereof, must be issued by the ADEQ for the Section 404 Permit to be valid. The Special Studies Section of the Environmental Division requests Water Quality Certifications for those projects requiring a Section 404 Permit.

### **1.4 SHORT TERM ACTIVITY AUTHORIZATION (STAA).**

The STAA provides the short term authorization from ADEQ that is needed to conduct approved work in waterbodies. This authorization allows for short-term activities conducted in the water, such as bridge or culvert construction, channel alterations, and ditch cleaning.

#### **Projects by Contract**

The Environmental Division reviews the overall list of projects being let to contract and notifies the Construction Division which of these projects will require a STAA. The STAA is then requested by the Construction Office Staff from ADEQ prior to the beginning of work. The submittal to ADEQ must contain information showing the location of the project, the type of activity requiring a STAA, and the duration of that activity.

For these projects, ADEQ provides the authorized STAA to the Construction Division. The Construction Division will provide the District Engineer and the Resident Engineer copies of the authorization. The Resident Engineer notifies the Contractor of receipt of the STAA by letter. The STAA is typically valid for a period of six months. If the covered activity is not completed in that time period, a renewal is required. The Resident Engineer is responsible for notifying the Construction Division by memo not less than three weeks prior to expiration of the STAA when renewal is necessary. If additional activities not covered by the original request are to occur, these must also be authorized by a re-submittal to ADEQ. The Resident Engineer shall notify the Construction Office by memo when the activity is completed. Procedures for STAA's

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are addressed in Construction Memorandum No. 07-08.

### **Projects by Department Forces**

Activity in any of the waterbodies involving Maintenance Division personnel or District forces should be coordinated with the Environmental Division to determine if the STAA is required. If required, the Maintenance Division or District will request a STAA from ADEQ. The work may not proceed until authorization is received from ADEQ. The STAA is typically valid for a period of six months. If the covered activity is not completed in that time period, a renewal is to be requested not less than three weeks prior to expiration of the STAA. If additional activities not covered by the original request are to occur, these must also be authorized by a re-submittal to ADEQ.

### **PENALTIES**

Failure to implement or maintain the SWPPP for any project can result in the revocation of either the Water Quality Certification and/or the Section 404 Permit for the project. Revocation of either results in a Cease and Desist order from the U.S. Army Corp of Engineers. All work on the project is discontinued until corrections are made to be in compliance with the SWPPP.

Any person who knowingly violates any provision of the Endangered Species Act may be assessed a civil penalty of not more than \$25,000 for each violation.

Failure to acquire a STAA may result in fines or penalties by ADEQ for water quality violations. Violations of the STAA may result in the revocation of the STAA and further fines or penalties by ADEQ.

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### **2.0 STORM WATER POLLUTION PREVENTION PLAN DEVELOPMENT**

#### **2.1. GENERAL**

Development of the Storm Water Pollution Prevention Plan (SWPPP) is the responsibility of the designer. The designer may be personnel from Roadway Design Division, Bridge Division, State Aid Division, Maintenance Division, or the District, depending on the type of activity involved.

The National Pollutant Discharge Elimination System (NPDES) General Construction Permit issued by the Arkansas Department of Environmental Quality (ADEQ) requires that the designer include more than a simple erosion and sediment control plan in the SWPPP. The designer should familiarize themselves with the requirements of the NPDES General Construction Permit. This section contains guidance for the designer regarding information to be included in the SWPPP.

The designer should be familiar with the various erosion and sediment controls that are normally utilized for Department projects. These may be found in the Standard Specifications, Supplemental Specifications, Special Provisions, Standard Drawings, and Appendix A of this Manual.

The designer should incorporate controls with the primary goal of retaining sediment on site to the maximum extent practicable. The NPDES General Construction Permit guidance says that "a goal of 80 percent removal of total suspended solids from flows that exceed predevelopment levels" should be used in designing storm water management controls.

The designer must designate Best Management Practices (BMPs) to maximize erosion and sediment control during construction. Erosion and sediment control is highly dependent on the BMPs contained in the plans and available to field personnel and the prudent use of the measures by the field personnel.

During development and design of the SWPPP, the designer should contact the field personnel to review the items to be included in the SWPPP. Field personnel should provide input and request changes to ensure that the SWPPP is as effective as possible. The input and changes may include additional quantities or changes to locations or types of BMP.

If the designer includes a BMP in the plans for projects to be contracted, it provides a bid price in the contract and the flexibility to utilize that BMP "as needed" in other places on the project. If a BMP is not available in the plans and would have to be added by change order, this may result in a higher cost and could effectively prohibit its use.

Some information required for the SWPPP will not be readily available to the designer.

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This includes Total Maximum Daily Load (TMDL) and 303(d) listed waters, wetlands acreage, and endangered species information. The information is available from the NPDES Section of the Environmental Division.

If the proposed work is within a waterbody, information concerning the proposed project must be provided to the Special Studies Section of Environmental Division. The information provided should include a project location map (plan title sheet), design data regarding the scope of the proposed project or change order. A conceptual plan, including quantity of excavation, quantity of temporary and/or permanent fill, sizes of pipes, culverts, or bridges installed, and approximate area impacted regarding all work in waters of the United States or wetlands are required to apply for Section 404 permits, water quality certification, and Short Term Activity Authorization (STAA). Digital photographs of the proposed project area are also helpful.

Unless specifically requested by ADEQ, the Department is not required to submit a SWPPP for Automatic Coverage Site projects discharging to Extraordinary Resource Waters (ERW), Ecologically Sensitive Waterbodies (ESW), waters with established Total Maximum Daily Loads (TMDLs), or waters of the 303(d) List which are impaired for turbidity and/or oil and grease. This is not a waiver from the requirement to protect these water bodies and those involved in designing and/or implementing the SWPPP should use the same care to insure the water bodies are protected from sediment runoff as would be used with Large Construction Sites.

ADEQ provides a checklist that should be utilized to determine the completeness of the SWPPP. A copy of the checklist for a final review of the SWPPP by the designer is in the Appendix E of this Manual.

### **2.2 REQUIREMENTS FOR PROJECT PLANS**

The designer should ensure that the project plans show the following information.

- Direction of stormwater flow;
- Areas of soil disturbance and areas not to be disturbed;
- Location of major structural and nonstructural controls;
- Main construction entrance and exit;
- Location where stabilization practices are expected to occur;
- Locations of areas used for truck washing and concrete wash-out;
- Location of all surface water bodies (including wetlands);
- Locations where stormwater is discharged to a surface water and/or municipal separate storm sewer system, if applicable;
- Locations where stormwater is discharged off-site (should be continuously updated)
- Areas where final stabilization has been accomplished and no further construction will take place.

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Before beginning the SWPPP development, site conditions must be reviewed. All existing conditions at the site, including soils topography, drainage patterns, and existing vegetation should be considered. Modifications to site topography will require well-engineered erosion and sediment controls during and after construction. The types and specific locations of erosion and sediment control devices to be used and complete erosion and sediment control plans must be developed using information regarding existing and proposed drainage patterns on the site, the guidance included in this Manual, and personal experience.

Erosion and sediment control devices typically are shown on separate sheets in the project plans. These are typically labeled "Erosion and Sediment Control Plans".

The erosion and sediment control process suggests some basic principles for development of the SWPPP. Some of these principles are:

- The SWPPP should emphasize erosion control measures with sediment control measures used as a last line of defense.
- Divide the site into drainage areas. BMPs should fit the existing terrain and soil conditions.
- Divert runoff from up slope. Overland flow from up slope areas should be diverted around disturbed areas using BMPs (usually stabilized ditches with ditch checks), to minimize the amount of erosion-generating runoff from the disturbed area.
- Limit the area of unprotected soil exposure. Natural cover should be retained where feasible and scheduling of the project should limit the size of disturbed areas.
- Minimize the duration of unprotected soil exposure. Schedule clearing and grubbing to minimize exposure time and quickly stabilize disturbed areas.
- Protect soil with vegetative cover, mulch, or erosion resistant material.
- Stream relocations should be considered as a last resort due to the requirements of the Section 404 Permit.
- Maintain 25 foot vegetative buffer zone from waterways, 50 feet for waterbodies designated for special protection, if possible. Minimize exposure if buffer cannot be maintained, stabilize as soon as possible and use BMPs as needed to protect the water body.
- Design slopes consistent with soil properties. Keep runoff velocities low. Measures that break slopes, disperse flows, and divert flows to stabilized outlets can reduce problems associated with concentrated flows and velocities.
- Control concentrated runoff. Protect on-site drainage ditches against scour and erosion, and to handle concentrated or increased runoff. Slope drains, rock, sod, erosion control matting, or other means of stabilization can be used on outlets going to the storm drainage system.
- Retard runoff with planned engineering measures.
- Retain sediment on-site. Temporary or permanent barriers, basins or other measures to trap sediment should be placed as close to the source as possible, but always on-site. Common drainage areas of ten (10) or more acres require a detention basin; if this is not feasible because of right of way limitations or some other reason, justification for not utilizing detention basins must be included in the

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SWPPP with other appropriate controls substituted.

When selecting BMPs for a site, the designer should consider the following:

- **FEASIBILITY** – BMPs must be capable of relatively quick and easy application considering field conditions.
- **DURABILITY** - Given the site conditions and the length of construction, the materials must maintain structural integrity during installation and endure until vegetation has established effective cover.
- **COMPATIBILITY** – BMPs should be selected with regard to public acceptability and environmental sensitivity, including visual or aesthetic impacts.
- **OPERATION** – Lack of maintenance is usually the primary cause of the failure of an erosion and sediment control plan. Difficulty and cost of maintenance of BMPs should be considered in erosion control planning, as well as accessibility.
- **EFFECTIVENESS** – BMPs should be considered based on effectiveness in a given situation.
- **COST** - Factors to be considered relative to costs include material costs, preparation costs, installation costs, and maintenance.
- **AVAILABILITY** – Materials for BMPs must be readily available from local suppliers or for immediate shipment when needed.

### **2.3 STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS**

The following are considered parts of the SWPPP:

- Contract with relevant Supplemental Specifications and Special Provisions
- SWPPP Special Provision
- Contractor and Subcontractor Certifications
- Inspection Forms
- NOI
- AHTD Erosion and Sediment Control Manual
- Authorization to Discharge Letter or Automatic Coverage Certificate
- Erosion Control Plans
- Standard Specifications
- Change Orders
- Site Manger Records/Project diary
- Copy of the Permit

The designer should utilize the latest version of the Storm Water Pollution Prevention Plan (SWPPP) Special Provision which contains the SWPPP template developed by the Department and approved by ADEQ. A copy of the template is located in Appendix D of this Manual and electronically on the Department's LAN.

A SWPPP is to be developed for each project in accordance with good engineering practices. Various items constitute the SWPPP and should be considered in

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development, including:

- *The AHTD Standard Specifications for Highway Construction, 2003 Edition*, (Standard Specifications) and Supplemental Specifications provide the specifications that are used. Special Provisions provide additional requirements for the specific project.
- Project plans contain temporary and permanent erosion controls and permanent storm water management measures as detailed specifically for the project as well as Standard Drawings for temporary erosion control devices and permanent storm water management measures.
- Project documents provide additional information including special provisions.
- Project records including SWPPP inspection reports, the daily inspection diary, and various pay quantity documentation, all of which detail the progression of work on the project, when instructions were given to install or maintain the erosion and sediment control (E&SC) items, and the timing and details of E&SC installation.
- The designer should complete the SWPPP Special Provision, inserting the appropriate information as outlined below.

### **Project Name and Location, Operator Name and Address:**

This information is normally taken from the project plans.

### **A. Site Description**

#### **1) Pre-construction Topographic view:**

This information is normally provided in the plans in the form of the profile and cross-sections.

#### **2) Project Description and Intended Use after NOT is filed:**

This may be taken from the description of the work to be undertaken in the project documents.

#### **3) Sequence of Activities:**

This is the sequence, in time order, of major soil disturbing activities.

#### **4) Total Acres Available/Total Disturbed Area:**

This information is estimated based on the construction plans.

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### **5) Existing Site Information:**

#### **Runoff Coefficients before and after construction:**

The runoff coefficients for the site before construction begins and after construction is complete must be provided. Information to assist in determining the runoff coefficients is contained in the Appendix D of this Manual.

#### **Soil Information:**

This is the general information available about the types of soils on the site.

### **B. Responsible Parties-General Contractors, Inspectors, etc.:**

These will include Prime and Subcontractors and Department personnel involved with the project. The names of Contractor personnel are not normally known when the SWPPP is being developed and will be added after the Contract is awarded and must be updated as changes occur.

### **C. Receiving Water:**

#### **1) Location of Surface Water on Construction Site:**

This includes all drainage patterns on the site and the slopes to remain following major grading activities. The plans must show names of waterbodies and areas of wetlands.

#### **2) The following bodies of water receive runoff from the construction site:**

Bodies of water that will receive runoff from the construction site are to be identified. If storm water from the project will discharge into a local separate storm sewer system, list the name of the system and/or the local receiving stream. The map located in the Appendix H of this Manual may be utilized to determine the Ultimate Receiving Water for the project area. The Operator of Municipal Separate Storm Sewer System information can be found in the Appendix I of this Manual. Additional information, including wetland acreage, may be obtained from the NPDES Section and Special Studies Section of the Environmental Division.

### **D. TMDL and 303(d) list:**

The NPDES Section of the Environmental Division must be contacted for information related to waterbodies on the Total Maximum Daily Load and 303(d) lists.

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### E. Attainment of Water Quality Standards after Authorization:

BMP's are to be selected that will minimize the discharge of pollutants as necessary to meet applicable water quality standards.

### F. Endangered Species:

Information concerning endangered species is to be obtained from the NPDES Section of the Environmental Division. If any endangered species are identified on the project, an Endangered Species Special Provision must be included in the contract.

### G. Site Map

This is normally the Erosion Control Plans for the project.

### H. Stormwater Controls

Information is to be provided as follows:

1. **Initial Site Stabilization, Erosion, & Sediment Controls** for the project site are to be included in the plans. The perimeter of the construction area and area for the sediment basins will be cleared. Diversion ditches, rock ditch checks and sediment basins will be installed around the perimeter of the site, and temporary seeding will be used to stabilize the ditches and basins before further clearing of the site will occur. On projects to be contracted, off-site material storage areas including overburden, stockpiles of dirt, and borrow areas, are operated by the Contractor and the Contractor is responsible for obtaining any necessary NPDES permits for the off-site areas. This includes installation and maintenance of erosion and sediment control BMPs in accordance with the NPDES General Construction Permit and the requirements of local authorities.
2. **Stabilization Practices** to be utilized and their scheduling should be listed to the extent practicable. Actual timing of erosion control installations will be determined daily based upon the construction activity occurring and actual field conditions.
3. **Structural Practices** to be utilized and scheduling of implementation for that practice should be listed. Actual timing of erosion control installations will be determined daily based upon the construction activity occurring and actual field conditions.

The designer should take into account normal construction sequences and any special items or situations that are anticipated on the project. Special items or situations should be discussed with field personnel.

### I. Other Controls:

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Controls must be included to properly manage solid wastes, hazardous wastes, dust generation, and all other activities that will generate wastes during the construction phase. These include:

1. Solid material control, debris and wastes will be prevented from becoming a pollutant source for storm water discharges. Any debris which inadvertently enters a water of the state will be removed in accordance with the Standard Specifications, Supplemental Specifications, Special Provisions, and/or plans.
2. Offsite vehicle tracking will be limited by use of stabilized entrance/exit areas and/or use of wheel washes at each vehicle exit from the construction site to prevent the tracking of material onto the public roadway. The number and locations of stabilized entrance/exit areas will be determined and included in the plan as work progresses and before they are utilized.
3. Temporary sanitary facilities will be in accordance with the Standard Specifications, Supplemental Specifications, Special Provisions, and/or plans. The number and locations of temporary sanitary facilities will be determined, provided and included in the plan as work progresses and before they are utilized.
4. Concrete waste areas are to be designated on the plans. The number and locations of concrete waste areas will be determined, provided and included in the plan as work progresses and before they are utilized.
5. Hazardous materials are to be addressed in accordance with the Standard Specifications, Supplemental Specifications, Special Provisions, and/or plans.

### **J. Non-Stormwater Discharges:**

All non-storm water discharges are prohibited unless in compliance and covered by an NPDES permit (other than the NPDES General Construction Permit), or as provided in the following paragraph. The Department's permit does not cover discharges from dedicated asphalt and dedicated concrete plants.

The following is a list of materials which could be potential sources of pollution in storm water runoff: asphalt materials, concrete, cement, concrete wash water, paint, solvents, petroleum products, fertilizers, concrete curing compound, lime, linseed oil, asphalt additives, concrete additives, and sewage.

Handling of the above materials shall be in accordance with the Standard Specifications, Supplemental Specifications, Special Provisions, and/or plans.

### **K. Post-Construction Stormwater Management:**

Measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur after construction operations are complete are to be described. Such practices may included, but are not limited to:

- infiltration of runoff onsite;

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- flow attenuation by use of open vegetated swales and natural depressions;
- stormwater retention structures;
- stormwater detention structures (including wet ponds);
- sequential systems which combine several practices.

A goal of at least 80% removal of total suspended solids from flows that exceed predevelopment levels should be used in designing and installing stormwater management controls (where practicable). Where this goal is not met, justification is to be provided for rejecting, based on site conditions, each practice listed above.

### **L. State or Local Plans:**

The NPDES Section of the Environmental Division should be contacted for information.

### **M. Inspections:**

Inspections will be conducted by a qualified inspector every seven days. The inspector will complete a report of the inspection. Completed inspection forms will be kept with the SWPPP.

### **N. Maintenance:**

Descriptions of procedures to maintain vegetation, erosion and sediment control measures and other protective measures in good, effective operating condition are contained in the Standard Specifications, Supplemental Specifications, Special Provisions, and plans. Any repairs to erosion and sediment control devices must be initiated within three business days of discovery.

### **O. Contractors:**

All contractors and subcontractors are required to complete the Contractor certification in the SWPPP Special Provision. The certification is to be signed in accordance with the signatory requirements found in the NPDES General Construction Permit (i.e., principal executive office, vice president, general partner, proprietor, elected official).

### **P. Inspectors:**

A qualified inspector, as indicated on the lists in Section 4.0, will conduct inspections and each inspector is required to sign the SWPPP Special Provision. Before performing an inspection on the project, the inspector must complete the required information and sign the SWPPP Special Provision.

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### Q. Plan Certification:

The Roadway Design Division Head, State Aid Division Head, the State Maintenance Engineer, or the District Engineer, whoever has oversight of the SWPPP preparation, will sign the statement on the SWPPP Special Provision

### SUBMITTAL TO ADEQ

Projects designed and/or administered by the Department are not submitted to a Qualified Local Program but are subject to the requirements of ADEQ.

The requirements for submittal to ADEQ varies depending on the size of the project as indicated below:

**Automatic Coverage (Small Construction) Site** – Small construction site projects receive automatic coverage under the NPDES General Construction Permit. The SWPPP is prepared for the project; however, ADEQ does not require submittal of the SWPPP. Therefore, ADEQ does not issue a tracking number for those sites.

For projects by Contract, Programs and Contracts Division (P&C) will obtain a Notice of Coverage (NOC) from the ADEQ website. The NOC will be included in the Contract documents.

For projects by Department forces, the designer will obtain the NOC from the ADEQ website.

**Large Construction Sites** – For a “Large” construction project site, the SWPPP must be submitted to ADEQ for review and approval before work can begin. The SWPPP and Notice of Intent (NOI) should be submitted sufficiently in advance to allow for receipt by ADEQ a minimum of two (2) weeks before the anticipated date for work to begin on the site. The designer is responsible for preparing the letter for submittal of the SWPPP.

For projects by Contract, the NOI will be completed by the Programs and Contracts Division (P&C), including obtaining all required signatures. P&C will submit the NOI and SWPPP to ADEQ. P&C will assume this responsibility when the designer forwards the SWPPP.

For projects by Department forces, the designer will complete the SWPPP and the NOI, including obtaining all required signatures, and submit it to ADEQ. P&C will assist with the submittal if requested.

ADEQ will respond either with a letter deeming the SWPPP acceptable or incomplete. If the SWPPP is acceptable, a Notice of Coverage (NOC) will be provided by ADEQ. If the SWPPP is incomplete, the designer is responsible for providing the additional information to re-submit the SWPPP to ADEQ.

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### **3.0 STORM WATER POLLUTION PREVENTION PLAN IMPLEMENTATION**

#### **3.1 PROJECTS BY CONTRACT**

The majority of the construction projects undertaken by the Department that require Storm Water Pollution Prevention Plans (SWPPP's) are contracted to independent Contractors. Each of these projects is under the oversight of a Resident Engineer. Implementation of the SWPPP is the responsibility of the Resident Engineer and their staff (field personnel).

The designer will normally develop and sign the SWPPP for the project. The Programs and Contracts Division (P&C) will obtain the signature of the District Construction Engineer (DCE), as the Cognizant Official. P&C will file the Notice of Intent (NOI) with the Arkansas Department of Environmental Quality (ADEQ) for Large Construction Sites and will obtain the Notice of Coverage (NOC) for Small Construction Sites. The District Engineer is responsible for submittal of the Notice of Termination (NOT).

During development and design of the SWPPP, the designer should contact the field personnel to review the items to be included in the SWPPP. Field personnel should provide input and request changes to ensure that the SWPPP is as effective as possible. The input and changes may include additional quantities or changes to locations or types of Best Management Practices (BMPs).

A BMP included in the project plans by the designer provides a bid price in the contract and the flexibility to utilize that BMP "as needed" in other places on the project. If a BMP is not available and is established by change order, negotiation with the Contractor may result in a higher price and could effectively prohibit its use.

The SWPPP is composed of several different items, including but not limited to Plans, Special Provisions, and Standard Specifications. This section contains guidance for field personnel regarding implementation and maintenance of the SWPPP.

The success of the SWPPP on a project is dependent on the cooperation between the Resident Engineer and the Contractor. The Resident Engineer and Contractor share responsibility for implementation of the SWPPP. The Contractor must perform the work necessary to place BMPs on the project. The Contractor must also act promptly to install additional devices and to maintain devices. The Resident Engineer provides inspection to ensure the BMPs are in place and maintained to remain effective. The Resident Engineer must act promptly to modify the SWPPP. The Resident Engineer has responsibility under the contract to take action in the event the Contractor fails to comply with their contractual responsibility.

On Department right of way, ADEQ, the Environmental Protection Agency (EPA), and the U.S. Army Corp of Engineers hold the Department, as the owner and/or operator, responsible for compliance with National Pollutant Discharge Elimination System

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(NPDES) requirements. These agencies monitor projects in regard to the work performed by Contractors on the right of way. In addition, the general public may also take action against the Department for violations of the NPDES General Construction Permit if the Contractor fails to comply with the SWPPP as required by the Standard Specifications, Supplemental Specifications, Special Provisions, and/or plans.

This section also applies to project right of way owned by other entities on Department administered contracts, such as State Aid Projects.

### 3.1.a SWPPP COMPONENTS

The SWPPP, along with all updates, must be available on the project during normal business hours, normally considered to be 8:00 A.M. to 5:00 P.M., for review.

A copy of the SWPPP must be placed in the project field office or in the inspector's vehicle if a project field office is not used.

Copies of all the components of the SWPPP should be placed in a three ring binder. Items that cannot be placed in the binder are to be maintained with the binder or on a laptop computer routinely on the project. A sheet should be placed at the front of the binder indicating that details for quantities and locations of erosion and sediment control items, rainfall records, and the resident engineer's diary are available from the Resident Engineer during normal business hours.

Copies of the following should be included in or with the binder:

- **Contract for the Project** containing all Supplemental Specifications and Special Provisions for erosion and sediment control items and their installation.
- **Completed SWPPP Special Provision** from the Contract.
- **Contractor** information is contained in the SWPPP Special Provision. A list of Contractors responsible for implementation of each measure identified in the SWPPP is included in the SWPPP Special Provision. Each Contractor must sign the SWPPP Special Provision. If additional Contractors/Subcontractors are added to the project, the list should be updated accordingly.
- **Inspector** information is contained in the SWPPP Special Provision. Each person who will be conducting inspections of the stormwater controls must be identified and sign the SWPPP Special Provision. This information must be updated if additional personnel are utilized.
- **Endangered Species Clearance** information is included in the SWPPP Special Provision and, if necessary, special provisions of the Contract.
- **Hazardous Materials Handling** information is found in the Standard Specifications, Supplemental Specifications, and Special Provisions.
- **Approved State or Local Plans** information for storm water management is incorporated into the SWPPP Special Provision.
- **Total Maximum Daily Load (TMDL)** information found in the SWPPP Special

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Provision provides documentation supporting a determination of NPDES General Construction Permit eligibility with regard to waters that have an established TMDL.

- **Wetland Information** found in the SWPPP Special Provision indicates the acreage of wetlands impacted. The NPDES General Construction Permit also requires wetlands to be shown on the plans.
- **Completed NOI** from the Contract. This must be posted on the site until receipt of the Notice of Coverage from ADEQ. This is not required for Automatic Coverage sites (under five acres).
- **Any additional Special Provisions** from the Contract relating to the SWPPP. Typically Water Pollution Control, related to water quality issues or endangered species protection.
- **AHTD Erosion and Sediment Control Design and Construction Manual**
- **NPDES General Construction Permit.** A copy is located in the Appendix C of this Manual.
- **Notice of Coverage** The notice is to be included in the binder, as well as posted on the site.
- **Plans.** A complete set of plans for the project.
- **Quantity Listing for All Erosion and Sediment Control Devices** from the plans and the executed Contract. Wherever possible, plans should show planned locations for these devices.
- **Standard Specifications.** A copy of the Standard Specifications for Highway Construction is to be maintained with the other SWPPP items.
- **Any SWPPP related correspondence and/or Change Orders.**
- **Updated As-Built Erosion & Sediment Control Plans.** A set of half size plan sheets showing all erosion and sediment control measures currently in place. These must be updated within seven business days of any changes. Revisions to the plans should be logged with the date of the revisions and initialed by the field personnel making the revision.
- **SWPPP Inspection Reports.** Once the Resident Engineer signs the report, a copy is to be given to the Contractor and a copy must be maintained on the site. The Resident Engineer is responsible for updating the SWPPP, as needed.
- **Resident Engineer's Construction Diary** is considered part of the SWPPP since it describes when, where, and how the SWPPP is implemented, maintained, and altered to fit conditions. For projects utilizing Site Manager, computer files and a laptop computer should be maintained on the Project, since hard copies of this information will not exist. If printed diaries are being utilized in lieu of SiteManager, the Resident Engineer must distribute a copy of the RE Diary to the project site on a weekly basis.

### 3.1.b GOALS

A designer cannot know every detail of a project in advance and develop a SWPPP for every situation that may develop on a project. Even a good SWPPP, however, will not produce the desired result of minimizing and controlling sediment unless the devices are installed and maintained in a timely manner. Field personnel should understand

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the importance of recognizing when devices or methods are not working even though they may be installed according to the SWPPP. If different devices or methods are needed, they should be utilized. The following guidelines and the overall goals should be considered when implementing a SWPPP:

- Limiting the area disturbed is better than trying to control erosion.
- Preventing erosion is better than trying to control sediment. Retaining vegetation or reestablishing it (seeding and mulching, sodding, or erosion matting) will virtually eliminate erosion. All other methods to retain sediment on the construction site will, on the average, only recover about 50% of the sediment.
- Permanent erosion controls are generally better than temporary controls.
- Routing clean water through or around a project is better than trying to remove sediment from it.
- Slow moving water will erode less soil than fast moving water.
- Slow moving water will drop more sediment than fast moving water. If erosion is not prevented, the next best practice is to pond the silt laden water for as long as possible and allow the silt to settle out.
- One of the most effective ways of reducing erosion and sediment problems on a project is to build and permanently stabilize the project as quickly as possible.

### **3.1.c MAINTAINING DEVICES**

For the SWPPP to be effective, the erosion and sediment control devices must be maintained to fulfill their intended purpose.

Maintenance can be divided into two areas:

- The repair or replacement of erosion and sediment control devices after they have been damaged, destroyed, or deteriorated beyond use.
- The removal and disposal of sediment collected by erosion and sediment control devices. Failure to do this can lead to the unnecessary failure of the devices and unnecessary cost to the Department. Guidelines for removing sediment are included in the Standard Specifications, Supplemental Specifications, Special Provisions, and/or plans. If the item, Sediment Removal and Disposal, is not included in the contract, it should be added by change order.

Regardless of whether the erosion and sediment control devices are permanent or temporary, or if it is winter or the height of the construction season, deficiencies should be corrected in a timely manner in order to have them ready for the next rain event.

Maintenance is not limited to temporary devices. Until the NOT is filed, inspections and maintenance should include all completed permanent devices and structures to determine if they have been damaged, if they are performing as intended, or need other maintenance, such as sediment removal.

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Some devices, like sediment basins, may remain in place at the completion of the project and never be removed. Utilization of these devices permanently should be determined at the beginning of the project and allowed only if it does not defeat the purpose of the SWPPP and only if it will not create a future maintenance problem.

### **3.1.d DEPARTMENT RESPONSIBILITIES**

The successful implementation of the SWPPP requires that the components and goals are understood. The erosion and sediment controls must be installed and used in accordance with good engineering practices. Field personnel should make themselves aware of the various controls and the proper use of each.

From the beginning of work on the site, field personnel have the responsibility for making the SWPPP a working plan. Field personnel have the authority and responsibility to make reviews and changes to eliminate devices that are not effective and require the installation of devices to most effectively prevent silt and sediment from leaving the site.

Field personnel must closely monitor and instruct the Contractor with regard to SWPPP compliance on the right of way. The Standard Specifications, Supplemental Specifications, Special Provisions, and/or plans provide much of the guidance to make the Contractor's actions coincide with the NPDES General Construction Permit requirements. In general, the Department is responsible for developing and implementing a SWPPP to cover all disturbed areas on the right of way on projects that disturb one acre or more. The devices and procedures required to do this are part of the contract, and the Contractor is to be paid to install and maintain them. There are other specific requirements in various parts of the contract and plans that also must be followed. Field personnel must balance the selection of sediment and erosion control devices with the contract cost of the devices to provide a cost effective solution to containing sediment within the project.

One of the principal methods the Resident Engineer uses for documentation of NPDES efforts is the "Storm Water Pollution Prevention Plan Inspection Report" (inspection report). A copy of the inspection report must be provided to the Contractor the day of the inspection to document the instructions. A copy of this report, along with instructions for completing it, is found in Section 4.0 of this Manual.

While the primary enforcement of requirements for the Contractor's project related facilities off the right of way rests with the applicable regulatory agency, the Department retains the right and authority to inspect and enforce Contract compliance should violations come to the attention of the Department. The Contractor is responsible for obtaining necessary permits and all related costs for the off-site locations.

Among the responsibilities of the Resident Engineer and the field personnel with regard to NPDES General Construction Permit compliance are:

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- Ensure that the Contractor posts the completed Notice of Coverage (NOC) in a place available at all times for public viewing. The Resident Engineer furnishes the NOC to the Contractor. The NOC must be posted prior to work beginning and available until the Notice of Termination (NOT) is filed and/or the project is completed.
  - Public Notice for Large Construction Sites. ADEQ will send a NOC to the State Construction Engineer if the project site is five acres or more. The State Construction Engineer will forward the original NOC to the District Engineer with a copy to the Resident Engineer. The District Construction Engineer must review the NOC to ensure that the information ADEQ has supplied is correct and sign it. If the NOC for a large site has not been received, the NOI must be posted.
  - Public Notice for Automatic Coverage Sites. If less than five (5) acres will be disturbed on the project, the designer will provide the NOC to the District Construction Engineer for review and signature.
- Post the location of the updated SWPPP as required by the NOC. The updated SWPPP must be maintained on the site during normal business hours. On the NOC, the location of the SWPPP must be listed.
- Perform and document inspections and instructions to the Contractor concerning temporary and permanent erosion control. Perform inspections as needed to monitor the effectiveness and condition of the Erosion and Sedimentation Control Plan and the devices installed.
- Ensure Contractor compliance with instructions related to the SWPPP and document instructions and compliance action in the project diary.
- Modify the SWPPP as necessary to produce effective results and fully document the modifications, including the reasons for the modifications on the SWPPP and as-built plans. Document all Department and Contractor action regarding sedimentation and erosion control.
- Determine if BMPs are providing conformance with the SWPPP and, if the BMP is not giving the desired results, initiate and document appropriate changes.
- Ensure that the Contractor's sequence of operations conforms to Standard Drawing (contained in the plans), the SWPPP, and the Plans.
- Maintain as-built plans, updated within seven business days of any changes, of erosion control measures installed and in use on the project.
- Ensure the Contractor limits the exposed acreage in accordance with the Standard Specifications, Supplemental Specifications, Special Provisions, and/or plans and the Contractor's and Sub-contractor's ability to implement and maintain the SWPPP.
- Ensure that sediment is not being tracked off-site. Limit the number of places that vehicles are entering and leaving the site, and direct the Contractor to install Stabilized Construction Entrances. The Contractor must designate locations for Stabilized Construction Entrances to be included in the SWPPP prior to utilizing them.
- Ensure that concrete drum wash water and grinding material is disposed of properly, i.e., in an excavation or footing, or other contained area where the wash water cannot leave the site. Never allow wash water near or in a waterbody or

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ditch. The Contractor must designate areas to be included in the SWPPP prior to utilizing them. The Standard Specifications, Supplemental Specifications, and Special Provisions provide additional information.

- Ensure that the Contractor maintains "good housekeeping," i.e., proper storage of materials, proper disposal of trash and construction waste, and clean up and report spills appropriately. The Contractor must designate areas for temporary sanitary facilities and for waste containers to be included in the SWPPP prior to utilizing them. The Standard Specifications, Supplemental Specifications, and Special Provisions provide additional information.
- Prepare the NOT for Large Construction Site projects when the area is 100% stabilized with 80% density. The District Engineer signs this form for submission to ADEQ. Photos of the stabilized areas must accompany the NOT.

The Resident Engineer and field personnel should ensure that the project plans show the following information:

- Direction of stormwater flow;
- Areas of soil disturbance and areas not to be disturbed;
- Location of major structural and nonstructural controls;
- Construction exits;
- Location where stabilization practices are expected to occur;
- Locations of areas used for truck washing and concrete wash-out;
- Location of all surface water bodies (including wetlands);
- Locations where stormwater is discharged to a surface water and/or municipal separate storm sewer system, if applicable;
- Locations where stormwater is discharged off-site (should be continuously updated)
- Areas where final stabilization has been accomplished and no further construction will take place.

This information should be updated on the plans as necessary during the project.

### **3.1.e CONTRACTOR RESPONSIBILITIES**

The Resident Engineer is to discuss the SWPPP, along with any special details related to it, at the preconstruction conference for the project.

The Contractor must understand what the Department expects and the Resident Engineer must know in advance how the Contractor plans to address the NPDES General Construction Permit requirements.

Items that should be discussed at the pre-construction conference include:

- The Department is responsible for implementing the SWPPP within the right of way. The Standard Specifications, Supplemental Specifications, and applicable Special Provisions tie the NPDES General Construction Permit to the Contract.

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- The Contractor's responsibilities on the right of way are to perform temporary and permanent erosion control work in accordance with the Plans and Specifications and as directed by the Resident Engineer. The Contractor is paid for this work in accordance with each item's applicable Specification. The Contractor's prompt installation and maintenance of erosion and sedimentation control items is a significant part of compliance with the SWPPP.
- The Department will conduct inspections of the erosion and sediment control devices as required by the NPDES NPDES General Construction Permit. A copy of the inspection report will be given to the Contractor the day of the inspection. The Contractor is required to perform the work within three (3) business days of being instructed to do it (i.e., date of inspection).
- The Contractor is to take appropriate temporary stabilization measures within 14 days of his temporarily abandoning an area if the site is to be temporarily abandoned for a total of 21 days or more. This work, often involving temporary seeding, will be paid for in accordance with the contract if the area is abandoned due to no fault of the Contractor. If, however, the Contractor abandons an area for his own convenience or due to his negligence (clears more area than he can work, etc.) payment will not be made for temporary stabilization items.
- The Contractor is to perform planned permanent stabilization measures (seeding, mulch cover, ditch paving, etc.) within 14 days after completion of an area.
- A pre-winterizing meeting will be held to discuss the items that need to be completed if work on the project is halted for the winter, the earthwork is halted for the winter, or any other reason. This meeting will be held early enough to allow time to complete the needed work. Seeding and temporary seeding should be accomplished, inasmuch as possible, early enough to allow establishment of vegetative growth prior to cold weather. A plan to maintain the project while work is halted should be established at that time.
- The Contractor shall designate stabilized construction exit locations on the project, areas to discharge concrete wastes, waste container locations, and temporary sanitary facility locations. The Contractor should designate the location of at least one of each of these items at the preconstruction meeting for inclusion in the SWPPP. Other locations may be designated during construction but no location is to be utilized prior to inclusion in the SWPPP. Since the number and location of these items are choices of the Contractor, these items are not paid for separately but are considered to be included in the other items of the contract.
- The Contractor and the property owner are responsible for obtaining any and all NPDES permits required for borrow pits, waste areas, plant sites, storage areas, quarries, and any other areas utilized in conjunction with construction projects outside the right of way. This includes developing and adhering to a SWPPP, filing a NOI, inspections, filing a NOT, etc. In addition, the Contractor is not paid directly for compliance with these Federal and State mandated requirements on off-site areas. Payment for temporary and permanent erosion control measures in these off-site areas is considered subsidiary to the other items of the contract. Some municipalities require additional permits to clear and excavate within their city limits. The Contractor is responsible for being familiar and being in compliance with these local requirements.

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- The Resident Engineer generally does not monitor the Contractor's compliance with the NPDES requirements in areas that are not on the right of way. While the primary enforcement of requirements for off-site locations rests with the applicable regulatory agency, the Department retains the right and authority to inspect and enforce Contractor compliance should violations come to the attention of the Department.

### **3.1.f INSPECTIONS BY FIELD PERSONNEL**

Maintenance of erosion and sediment control devices is considered important enough to warrant a formal inspection program. This program is a requirement of the NPDES General Construction Permit and is Department policy. To comply with the NPDES General Construction Permit, the "Storm Water Pollution Prevention Plan Inspection Report" form (inspection report) has been developed for use by the Resident Engineer and field personnel.

Qualified personnel, holding one of the Job Titles recognized by the Department (a list is provided in Section 4.0 of this Manual), must perform the inspection. These personnel must complete training provided by the Department. Before performing an inspection, personnel must sign the SWPPP Special Provision.

The inspection report is to be completed a minimum of every seven days. As-built Erosion and Sediment Control Plans indicating items currently in place must also be updated within seven business days of any changes. If BMPs are noted that require attention or if site conditions change between inspections, field personnel should require the Contractor to undertake maintenance and provide necessary changes to the SWPPP.

The Resident Engineer and field personnel should work closely with the Contractor and be familiar with their schedules. A supplemental SWPPP inspection should be performed when the Contractor is halting work in an area and the Contractor instructed to perform the required seeding and other measures required. Areas of non-work can be inspected separately. Field personnel should not wait until the next inspection interval to see that the Contractor is addressing deficiencies to erosion and sediment controls.

A copy of the inspection report must be given to the Contractor the day of the inspection to document the instructions and one copy must be placed in the project files with an additional copy kept at the project site. The Contractor is required to complete the work within three (3) business days of being instructed to do it (i.e., date of inspection). The Contractor compliance with these instructions should be documented in the project diary.

Inspections are not required when snow cover exists over the entire site for an extended period and melting conditions do not exist.

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After final stabilization has been established, monthly reports are acceptable.

### 3.1.g INSPECTIONS BY OTHERS

The Resident Engineer and field personnel should be aware that inspectors from ADEQ, EPA, or the U.S. Corp of Engineers and personnel from within the Department might periodically visit the project and review both the documentation and the project itself regarding erosion and sedimentation control.

The most common visit may involve inspectors from ADEQ and/or EPA. Field personnel should expect ADEQ and/or EPA inspectors to arrive at unexpected times. There are several things field personnel should remember when these inspectors visit:

- All field personnel on the project should have at least basic knowledge of NPDES General Construction Permit requirements.
- Field personnel should inform the Resident Engineer as soon as possible. The Resident Engineer should be present during the inspection, if possible. The Resident Engineer should immediately let the District Construction Engineer and the Staff Construction Engineer know of any problems/citations anticipated as a result of an ADEQ and/or EPA inspection.
- Only field personnel familiar with the project, the Contractor operations, the records for the project, and the Department policies regarding NPDES compliance, should speak for the Department to EPA and/or ADEQ inspectors.
- Field personnel should always accompany the ADEQ and/or EPA inspectors on their inspection.
- Field personnel should answer questions they are asked with clear, direct answers and should not provide unnecessary or immaterial information.
- Field personnel should know what the SWPPP consists of and the location of it on the project.
- If ADEQ and/or EPA inspectors instruct that certain additional actions/controls be implemented, field personnel should cooperate with them inasmuch as reasonably possible. ADEQ personnel will not, as a matter of their agency's policy, direct specific actions regarding erosion and sediment control actions on a permittee's project. They may offer general advice if requested.
- If ADEQ and/or EPA inspectors request copies of any of the SWPPP paperwork, arrangements must be made to provide the copies.
- Allow and assist ADEQ and/or EPA inspectors if they request to view electronic documents, such as SiteManager documents. This should be done on the project using the Department's laptop computers.
- Fully document the ADEQ and/or EPA inspector's visit in the form of a diary note and memo to the District Engineer, listing any concerns brought out in the visit and action taken related to the concerns. Observe and record anything the ADEQ and/or EPA inspector observes or records.
- The Resident Engineer should take photos to document areas of concern noted by

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- the ADEQ and/or EPA inspector. Photos should be taken no later than the next day.
- All complaints involving water quality, etc., should be responded to and full documentation of both the complaint and the response should be provided in the SWPPP.
  - The Contractor should be informed of these inspections and, if possible, a Contractor representative should be present for the inspection.
  - The Resident Engineer should request that the Contractor contact them immediately if Contractor personnel observe ADEQ and/or EPA performing an inspection without a Department representative present.

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### **3.2 PROJECTS BY DEPARTMENT FORCES**

On projects to be undertaken by Department forces, the requirements of the National Pollutant Discharge Elimination System (NPDES) regulations apply just as they do on projects let to contract by the Department. Appropriate erosion and sediment control devices are to be installed on all projects undertaken by Department forces, regardless of the area of disturbed land.

The design, implementation, review, and maintenance of the Storm Water Pollution Prevention Plan (SWPPP) and erosion control items are all the responsibility of Department forces on construction projects undertaken by Department forces.

When required, the District or Maintenance Division personnel as the designer will develop a SWPPP for a project in the manner described in this Manual. The District Engineer or State Maintenance Engineer will designate the appropriate personnel as the Contact Person for the project. The District Engineer is responsible for submittal of the Notice of Termination (NOT).

Signatory authority for these projects is normally the District Engineer or the State Maintenance Engineer. The cognizant official for these projects is normally the District Maintenance Engineer for the District where the work is to be undertaken. The Contact Person to be listed on the NOI is normally the District Maintenance Engineer. The District Engineer or the State Maintenance Engineer will file the Notice of Intent (NOI) with the Arkansas Department of Environmental Quality (ADEQ) for Large Construction Sites and will obtain the Notice of Coverage (NOC) for Small Construction Sites from the ADEQ website. The District Maintenance Engineer will coordinate Department forces (field personnel) to implement the SWPPP.

During development and design of the SWPPP, the designer should contact the field personnel to review the items to be included in the SWPPP. Field personnel should provide input and request changes to ensure that the SWPPP is as effective as possible. The input and changes may include additional quantities, or changes to locations or types of Best Management Practices (BMPs).

After the project begins, field personnel have the final responsibility of making the SWPPP a working plan. Field personnel must closely monitor the work with regard to SWPPP compliance. If the design of the SWPPP is not adequate, field personnel must institute changes.

Standard Specifications, Supplemental Specifications, and Special Provisions provide guidance that can be utilized to ensure compliance with the NPDES General Construction Permit requirements. In general, the Department is responsible for developing and implementing a SWPPP to cover all disturbed areas on projects that exceed one acre of total disturbed area.

The SWPPP is composed of several different items, including but not limited to Plans,

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Special Provisions, Supplemental Specifications, and Standard Specifications. This section contains guidance for field personnel regarding implementation and maintenance of the SWPPP.

On Department right of way, ADEQ, the Environmental Protection Agency (EPA), and the U.S. Army Corp of Engineers hold the Department (the owner and/or operator) responsible for compliance with NPDES requirements. In addition, the general public may also take action against the Department for violations of the NPDES General Construction Permit if the Department fails to comply with the SWPPP.

On project related facilities off the right of way, the Department is responsible for obtaining necessary permits. The sites should be determined and included in the SWPPP during development of the project plans if possible.

### 3.2.a SWPPP COMPONENTS

The SWPPP, along with all updates, must be available on the project during normal business hours, normally considered to be 8:00 A.M. to 5:00 P.M., for review.

A copy of the SWPPP may be placed in the project field office or in the project personnel's vehicle if a project field office is not used.

Copies of all the components of the SWPPP should be placed in a three ring binder. Items that cannot be placed in the binder are to be maintained with the binder. A sheet should be placed at the front of the binder indicating that any information that may not be in the binder is available from the District Maintenance Engineer during normal business hours.

Copies of the following items should be included in or with the binder:

- **Completed SWPPP Special Provision.**
- **Contracts** are not utilized on projects undertaken by Department forces; however, all applicable Supplemental Specifications and Special Provisions for erosion and sediment control items and their installation should be included in the project documentation.
- **Contractor** information is contained in the SWPPP Special Provision. Generally there are no Contractors or Subcontractors on projects by Department forces. A list of the personnel with overall charge of the project, usually the District Maintenance Engineer or supervisors should sign this area as implementing erosion and sediment controls. This information must be updated if additional personnel are utilized.
- **Inspector** information is contained in the SWPPP Special Provision. Each person who will be conducting inspections of the stormwater controls must be identified and sign the SWPPP Special Provision. This information must be updated if additional personnel are utilized.

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- **Endangered Species Clearance** information is included in the SWPPP Special Provision and special provisions.
- **Hazardous Materials Handling** information is found in the Standard Specifications, Supplemental Specifications, and Special Provisions.
- **Approved State or Local Plans** for storm water management are incorporated into the SWPPP Special Provision.
- **Total Maximum Daily Load (TMDL)** information found in the SWPPP Special Provision provides documentation supporting a determination of NPDES General Construction Permit eligibility with regard to waters that have an established TMDL.
- **Wetland Information** found in the SWPPP Special Provision indicates the acreage of wetlands impacted. The NPDES General Construction Permit also requires wetlands to be shown on the plans.
- **Completed NOI** must be posted on the site until receipt of the Notice of Coverage from ADEQ. This is not required for Automatic Coverage sites (under five acres).
- **Any additional Special Provisions** relating to the SWPPP. Typically Water Pollution Control, related to water quality issues or endangered species protection.
- **AHTD Erosion and Sediment Control Design and Construction Manual.**
- **NPDES General Construction Permit.** A copy is located in Appendix C of this Manual.
- **Notice of Coverage.** The notice is to be included in the binder, as well as posted on the site.
- **Plans.** A complete set of plans for the project.
- **Quantity Listing for All Erosion and Sediment Control Devices.** This is normally a part of the plans. Wherever possible, plans should list planned locations for these devices.
- **Standard Specifications.** A copy of the Standard Specifications for Highway Construction is to be maintained with other SWPPP items.
- **Any SWPPP related correspondence and/or changes.**
- **Updated As-Built Erosion & Sediment Control Plans.** A set of half size plan sheets showing all erosion and sediment control measures currently in place. These must be updated within seven business days of any changes. Revisions to the plans should be logged with the date of the revision and initialed by the field personnel making the revision.
- **SWPPP Inspection Reports.** Once the District Maintenance Engineer signs the report, a copy must be maintained on the site. Field personnel are responsible for updating the SWPPP, if needed.
- **Project Diary.** Written diaries of daily activities on the project are to be completed by field personnel in charge of the site. Weather conditions, including general conditions, high and low temperatures, and rainfall should be recorded in the diary. The diary should include when, where, and how the SWPPP is implemented, maintained, and altered to fit conditions. A copy of the diary must be included with other SWPPP items on a weekly basis.

## **2009 EROSION AND SEDIMENT CONTROL DESIGN AND CONSTRUCTION MANUAL**

### **3.2.b GOALS**

A designer cannot know every detail of a project in advance and develop a SWPPP for every situation that may develop on a project. Even a good SWPPP, however, will not produce the desired result, of minimizing and controlling sediment, unless the devices are installed and maintained in a timely manner. Field personnel should understand the importance of recognizing when devices or methods are not working even though they may be installed according to the SWPPP. If different devices or methods are needed, they should be utilized.

The following guidelines and the overall goals should be considered when implementing a SWPPP:

- Limiting the area disturbed is better than trying to control erosion.
- Preventing erosion is better than trying to control sediment. Retaining vegetation or reestablishing it (seeding and mulching) will virtually eliminate erosion. All other methods to retain sediment on the construction site will, on the average, only recover about 50% of the sediment.
- Permanent erosion controls are generally better than temporary controls.
- Routing clean water through or around a project is better than trying to remove sediment from it.
- Slow moving water will erode less soil than fast moving water.
- Slow moving water will drop more sediment than fast moving water. If erosion is not prevented, the next best practice is to detain the silt laden water for as long as possible and allow the silt to settle out.
- One of the most effective ways of reducing erosion and sediment problems on a project is to build and permanently stabilize the project as quickly as possible.

### **3.2.c MAINTAINING DEVICES**

Maintenance can be divided into two areas:

- The repair or replacement of erosion and sediment control devices after they have been damaged, destroyed, or deteriorated beyond use.
- The removal and disposal of sediment collected by erosion and sediment control devices. Failure to do this can lead to the unnecessary failure of the devices and unnecessary cost to the Department. Guidelines for removing sediment are included in the Standard Specifications, Supplemental Specifications, Special Provisions, and/or plans.

Regardless of whether the erosion and sediment control devices are permanent or temporary, or if it is winter or the height of the construction season, deficiencies should be corrected in a timely manner in order to have them ready for the next rain event.

Maintenance is not limited to temporary devices. Until the NOT is filed, inspections and

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maintenance should include all completed permanent devices and structures to determine if they have been damaged, if they are performing as intended, or need other maintenance, such as sediment removal.

A pre-winterizing review must be made if the project is to be halted for the winter or halted for any other reason. This review must be held early enough to allow time to complete the needed work. Seeding and temporary seeding should be accomplished, inasmuch as possible, early enough to allow establishment of vegetative growth prior to cold weather. A plan to maintain the project while work is halted should be established at that time.

Some devices, like sediment basins, may remain in place at the completion of the project and never be removed. Utilization of these devices permanently should be determined at the beginning of the project and allowed only if it does not defeat the purpose of the SWPPP and only if it will not create a future maintenance problem.

### **3.2.d RESPONSIBILITIES**

A review of all components of the SWPPP reveals that there is much more involved than installing the erosion and sediment control devices shown in the plans. When work begins on the site, field personnel have the responsibility for making the SWPPP a working plan. The successful implementation of the SWPPP is dependent on field personnel closely monitoring and insuring compliance with the SWPPP on projects undertaken by Department Forces.

Prompt installation and maintenance of erosion and sedimentation control items is a significant part of compliance with the SWPPP. Field personnel have the authority and responsibility to make reviews and changes to eliminate devices that are not effective and require the installation of devices to most effectively prevent silt and sediment from leaving the site.

Field personnel are responsible for insuring that work complies with the SWPPP. Utilizing BMPs to control storm water and erosion insures compliance. The BMPs are, to a great extent, determined in the field (i.e., when to seed/temporary seed, where ditch checks are needed, etc). If erosion and sediment controls and methods provided in the SWPPP are not effective, field personnel are responsible to initiate and document appropriate changes. Field personnel should be aware of the various temporary and permanent erosion and sediment control measures and the proper use of each.

The Standard Specifications, Supplemental Specifications, and Special Provisions should be utilized for guidance in the construction and maintenance of BMPs and field personnel should become familiar with them.

The NPDES General Construction Permit requires that off-site vehicle tracking of

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sediment must be minimized. Field personnel should be prepared to take action should tracking of sediment become an issue.

The NPDES General Construction Permit also requires that efforts with regard to the SWPPP be documented. One of the principal means of documenting NPDES efforts is the "Storm Water Pollution Prevention Plan Inspection Report" (inspection report). A copy of this report, along with instructions for completing it, is found in this Manual.

Another means of documenting efforts is the Project Diary. Field personnel should complete a daily project diary. The diary should include details related to major activities, including weather and efforts related to the SWPPP, on the project. A copy of the diary should be included with other SWPPP items on a weekly basis.

Among the responsibilities of the field personnel with regard to NPDES General Construction Permit compliance are:

- Ensure that the completed Notice of Coverage (NOC) is posted on the construction site in a place available for public viewing at all times. The NOC must be posted prior to work beginning and available until the Notice of Termination (NOT) is filed and/or the project is completed.
  - Public Notice for Large Construction Sites. ADEQ will send a NOC to the State Construction Engineer if the project site is five acres or more. The State Construction Engineer will forward the original NOC to the District Engineer. The District Maintenance Engineer (DME) must review the NOC to ensure the information ADEQ has supplied is correct. The DME must sign the NOC. If the Notice of Coverage for a large site has not been received, the NOI must be posted.
  - Public Notice for Automatic Coverage Sites. If the construction project is less than five (5) acres, the designer will provide the NOC to the District Maintenance Engineer for review and signature.
- Post the location of the updated SWPPP on the site, as required by the NOC. The updated SWPPP must be maintained on the site and available during normal business hours. On the NOC, the location of the SWPPP must be listed.
- Perform and document inspections concerning temporary and permanent erosion control. Perform inspections as needed to monitor the effectiveness and condition of the Erosion and Sedimentation Control Plan and the Devices installed. A copy of the inspection report must be maintained at the project site. Field personnel should document follow-up compliance with these inspections in the project diary.
- Modify the SWPPP as necessary to produce effective results and fully document the modifications including the reasons for the modifications on the SWPPP and as-built plans. Document all action regarding sedimentation and erosion control.
- Determine if BMPs are providing conformance with the SWPPP and, if the BMP is not giving the desired results, initiate and document appropriate changes.
- Ensure adherence to the SWPPP.
- Ensure that the sequence of operations conforms to Standard Drawing TEC-3 (contained in the plans), the SWPPP, and the Plans.

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- Maintain as-built Erosion and Sediment Control Plans, updated within seven business day of any changes, for erosion control measures installed and in use on the project.
- Ensure the exposed acreage is in accordance with the Standard Specifications, Supplemental Specifications, Special Provisions, and/or plans and the Department forces' ability to implement and maintain the SWPPP.
- Ensure that sediment is not being tracked off-site. Limit the number of places that vehicles are entering and leaving the site, and install Stabilized Construction Entrances. Locations of the Stabilized Construction Entrances must be documented on the SWPPP prior to utilizing them.
- Ensure that concrete drum wash water and grinding material is disposed of properly, i.e., an excavation, or other contained area where the wash water cannot leave the site. Never allow wash water near or in a waterbody or ditch. A designated area must be documented on the SWPPP prior to being utilized. The Standard Specifications, Supplemental Specifications, and Special Provisions provide additional information.
- Ensure that "good housekeeping," i.e., proper storage of materials, proper disposal of trash and construction waste, is maintained and that any spills are appropriately cleaned up and reported. Areas for temporary sanitary facilities and for waste containers must be documented on the SWPPP prior to being utilized. The Standard Specifications, Supplemental Specifications, and Special Provisions provide additional information.
- Prepare the NOT for Large Construction Site projects when the area is 100% stabilized with 80% density. The District Engineer signs this form for submission to ADEQ. A photo (or photos) showing the stabilized site must accompany the NOT.

Field personnel should ensure that the project plans show the following information:

- Direction of stormwater flow;
- Areas of soil disturbance and areas not to be disturbed;
- Location of major structural and nonstructural controls;
- Main construction entrance and exit;
- Location where stabilization practices are expected to occur;
- Locations of areas used for truck washing and concrete wash-out;
- Location of all surface water bodies (including wetlands);
- Locations where stormwater is discharged to a surface water and/or municipal separate storm sewer system, if applicable;
- Locations where stormwater is discharged off-site (should be continuously updated)
- Areas where final stabilization has been accomplished and no further construction will take place.

This information should be updated on the plans as necessary during the project.

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### **3.2.e INSPECTIONS BY FIELD PERSONNEL**

Maintenance of erosion and sediment control devices is considered important enough to warrant a formal inspection program. The inspection program is a requirement of the NPDES General Construction Permit and is Department policy. To comply with the NPDES General Construction Permit, the "Storm Water Pollution Prevention Plan Inspection Report" (inspection report) form has been developed for use by field personnel.

Qualified personnel, holding one of the Job Titles recognized by the Department (a list is provided in this Manual), must perform the inspection. These personnel must complete Erosion and Sediment Control Training provided by the Department. Before performing an inspection, personnel must sign the SWPPP Special Provision.

The inspection report is to be completed a minimum of every seven days. As-built Erosion and Sediment Control Plans indicating items currently in place must also be updated within seven days of any changes. If BMPs are noted that require attention or if site conditions change between inspections, the field personnel should undertake maintenance and provide necessary changes to the SWPPP.

Field personnel should review the work schedules closely. A supplemental SWPPP inspection should be performed when the work is being halted in an area and the required seeding and other measures performed promptly. The areas of non-work should be inspected separately. Corrective work should not be delayed until the end of the inspection interval but deficiencies to erosion and sediment controls should be completed immediately following an inspection.

Field personnel responsible for undertaking the work should be made aware of the findings of the inspection and a copy of the inspection report must be included with other SWPPP items on the project. The work is required to be completed within three (3) business days of the inspection. Field personnel should document compliance with these inspections in the project diary.

Inspections are not required when snow cover exists over the entire site for an extended period and melting conditions do not exist.

After final stabilization has been established, monthly reports are acceptable.

### **3.2.f INSPECTIONS BY OTHERS**

Field personnel should be aware that inspectors from ADEQ, EPA, or the U.S. Army Corp of Engineers and personnel from within the Department might periodically visit the project and review both the documentation and the project itself regarding erosion and sedimentation control.

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The most common visit may involve inspectors from ADEQ and/or EPA. Field personnel should expect ADEQ and/or EPA inspectors to arrive at unexpected times. There are several things field personnel should remember when these inspectors visit:

- All supervisory field personnel on a project should have at least basic knowledge of NPDES General Construction Permit requirements.
- Field personnel should inform the District Maintenance Engineer as soon as possible. The District Maintenance Engineer should be present during the inspection, if possible. The District Maintenance Engineer should immediately let the District Engineer know of any problems/citations anticipated as a result of an ADEQ and/or EPA inspection.
- Only field personnel familiar with the project, the Department operations, the Department records for the project, and the Department policies regarding NPDES compliance, should speak for the Department to EPA and/or ADEQ inspectors.
- Field personnel should always accompany the ADEQ and/or EPA inspectors on their inspection.
- Field personnel should answer questions they are asked with clear, direct answers and should not provide unnecessary or immaterial information.
- Field personnel should know what the SWPPP consists of and the location of it on the project.
- If ADEQ and/or EPA inspectors instruct that certain additional actions/controls be implemented, field personnel should cooperate with them inasmuch as reasonably possible.
- If ADEQ and/or EPA inspectors request copies of any of the SWPPP paperwork, arrangements must be made to provide the copies.
- Allow and assist ADEQ and/or EPA inspectors if they request to view documents. This should be done on the project.
- Field personnel should fully document the ADEQ and/or EPA inspector's visit in the form of a diary note and memo to the District Engineer, listing any concerns brought out in the visit and action taken related to the concerns. Observe and record anything the ADEQ and/or EPA inspector observes or records.
- Field personnel should take photos to document areas of concern noted by the ADEQ and/or EPA inspector. Photos should be taken no later than the next day.
- All complaints involving water quality, etc., should be responded to and full documentation of both the complaint and the response should be provided in the SWPPP.

## **2009 EROSION AND SEDIMENT CONTROL DESIGN AND CONSTRUCTION MANUAL**

### **4.0 STORM WATER INSPECTION REPORT FORM PREPARATION**

A formal inspection program is a requirement of the NPDES General Construction Permit and Department policy. To comply with the NPDES General Construction Permit, the "Storm Water Pollution Prevention Plan Inspection Report" (inspection report) form has been developed for use by field personnel. The inspection report is to be completed a minimum of every seven days.

#### **PAGE 1:**

Item 1. On projects by Contract this is the Job Number.

On projects by Department Forces this is normally a Special Project Number.

Item 2. Enter the date of this inspection.

Item 3. Enter the date of the last Inspection (previous report). Inspections are to be conducted a minimum of every seven days.

Item 4. Enter the Report Number. Reports are numbered consecutively and each inspection represents one Report. If an inspection requires the use of more than one form, all forms for the inspection, on that date, receive the same Report Number.

Item 5. Check Yes or No. Determine if the Notice of Coverage needs to be posted or replaced. On Projects by Contract, the Contractor is responsible for maintaining the Notice of Coverage. On projects by Department Forces, Department personnel are responsible for maintaining the Notice of Coverage.

Item 6. For each item installed on the project if they are in satisfactory condition and there is no present need to construct additional ones, insert an "X" under "Satisfactory". If this item is not applicable to the project, insert "N/A" under "Satisfactory". If maintenance is required or additional items are needed, leave this Item blank.

Item 7. If Item 7 was "N/A" or "Satisfactory" leave this item blank.

If Item 7 was left blank, insert the Location(s) where maintenance and/or new installation(s) are required.

Example: "Sta 10 -15 Lt."

Item 8. For location numbers designated as requiring maintenance in Item 7, specify the reason for maintenance.

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**PAGE 2:**

Item 9. If work is required for stabilization, enter the location of areas that have been disturbed but where work is not planned or is completed. Temporary or permanent seeding is to be placed within 14 days of the date work ceased if work is not to resume in an area within 21 days.

If no work is required, enter "NONE".

Item 10. "Check" the type work required for each area noted in Item 9.

Item 11. Enter the location of any other work required with regard to sedimentation and erosion control but not previously addressed.

Item 12. Describe the work required at the locations identified in item 11.

Item 13. Enter any pertinent Remarks related to the inspection.

Item 14. The Inspector signs and dates the Report. The Inspector must also place their Job Title on the form.

Construction Division Personnel with the following Arkansas State Highway and Transportation Department Job Titles are assigned to the Resident Engineer's office and are considered qualified to perform the inspections and sign the inspection report:

Construction Helper I  
Construction Helper II  
Construction Aide I  
Construction Aide II  
Construction Aide III  
Inspector  
Senior Inspector  
Construction Materials Inspector  
Senior Construction Materials Inspector  
Construction Project Coordinator  
Civil Engineering Technician  
Civil Engineer  
Civil Engineer I  
Construction Field Engineer I  
Construction Field Engineer II  
Advanced Construction Field Engineer  
Assistant Resident Engineer  
Resident Engineer  
Resident Office Technician  
District Construction Engineer

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Maintenance Division Personnel with the following Arkansas State Highway and Transportation Department Job Titles are considered qualified and may sign the inspection report:

Crew Leader  
Maintenance Aide II  
Area Maintenance Supervisor  
Maintenance Job Superintendent  
Sealing Job Superintendent  
Bridge Job Superintendent  
District Maintenance Engineer

Qualified personnel, holding the Job Titles above must perform the inspection. These personnel must complete Erosion and Sediment Control Training provided by the Department. Before performing an inspection on the project, the inspector must complete the required information and sign the SWPPP Special Provision Special Provision.

Item 15. On Projects by Contract, the Resident Engineer or the Assistant Resident Engineer will sign and date the certification statement.

On Projects by Department Forces, the District Maintenance Engineer will sign and date the certification statement.

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### STORMWATER POLLUTION PREVENTION PLAN INSPECTION REPORT

rev. 9-23-08

JOB No.: 1  
 DATE: 2  
 NOTICE OF COVERAGE POSTED 6

DATE OF LAST INSPECTION 3  
 DATE OF LAST 1/2" RAIN EVENT 4  
 YES    NO     
 SWPPP TO BE UPDATED BY AHTD WITHIN SEVEN BUSINESS DAYS

REPORT No. **5**

	SATISFACTORY	MAINT.REQ.(LOCATION)	ADDITIONAL REQ.(LOCATION)
I. SILT FENCES: <span style="float: right;"><u>7</u></span>	(1) _____		(1) _____
IF MAINTENANCE REQUIRED SPECIFY REASON, BY LOCATION #.			
POOLED WATER ( ) TORN/SAGGING FABRIC ( )	(2) _____	<b>8</b>	(2) _____
SED. 1/3 FENCE HEIGHT <b>9</b> ( ) POST LEANING ( )	(3) _____		(3) _____
OTHER _____ ( )			
II. DIVERSION DIKES / DRAINAGE SWALES / SLOPE DRAINS:	(1) _____		(1) _____
IF MAINTENANCE REQUIRED SPECIFY REASON, BY LOCATION #.			
OVERTOPPING WATER ( ) WASHOUTS ( )	(2) _____		(2) _____
AREA NEEDS STABILIZATION/VEGETATION ( ) EXCESSIVE EROSION ( )	(3) _____		(3) _____
OTHER _____ ( )			
III. BARRIER / CHECK DAMS:	(1) _____		(1) _____
IF MAINTENANCE REQUIRED SPECIFY REASON, BY LOCATION #.			
DAMAGED ( )	(2) _____		(2) _____
SED. 1/2 HEIGHT OF BARRIER / DAM ( )	(3) _____		(3) _____
OTHER _____ ( )			
IV. SEDIMENT BASINS:	(1) _____		(1) _____
IF MAINTENANCE REQUIRED SPECIFY REASON, BY LOCATION #.			
SIDE SLOPES &/OR OUTFALL IN NEED OF REPAIR ( )	(2) _____		(2) _____
50% FILLED WITH SEDIMENT ( )	(3) _____		(3) _____
EMBANKMENT CONTAINMENT OVERTOPPED ( )			
OTHER _____ ( )			
V. CONSTRUCTION EXITS (If maintenance required, specify by location #)	(1) _____		(1) _____
TRACKING ONTO ROADWAY? ( )	(2) _____		(2) _____
CLEAN FILL NEEDED? ( )	(3) _____		(3) _____
IF CULVERT INSTALLED, IS MAINT. NEEDED? ( )			
DOES ALL TRAFFIC USE EXIT Y/N? ( )			
VI. GOOD HOUSEKEEPING / DISPOSAL OF CONCRETE WASTES:	(1) _____		(1) _____
IF MAINTENANCE REQUIRED SPECIFY REASON, BY LOCATION #.			
_____ ( ) _____ ( )	(2) _____		(2) _____
	(3) _____		(3) _____
VII. OTHER: (specify) _____	(1) _____		(1) _____
IF MAINTENANCE REQUIRED SPECIFY REASON, BY LOCATION #.			
_____ ( )	(2) _____		(2) _____
_____ ( )	(3) _____		(3) _____

# 2008 EROSION AND SEDIMENT CONTROL DESIGN AND CONSTRUCTION MANUAL

## STORMWATER POLLUTION PREVENTION PLAN INSPECTION REPORT

rev. 11-1-08

JOB No.           1          

### STABILIZATION

#### REQUIRED WORK NOT YET PERFORMED

FROM STATION	TO STATION	DATE LAST DISTURBED	TEMP. SEEDING	PERM. SEEDING	MULCH COVER	SOLID SODDING	EROSION CONTROL MAT.	WATER	SEED REPAIR
9			( )	( )	( )	10	( )	( )	( )
_____	_____	_____	( )	( )	( )	( )	( )	( )	( )
_____	_____	_____	( )	( )	( )	( )	( )	( )	( )
_____	_____	_____	( )	( )	( )	( )	( )	( )	( )
_____	_____	_____	( )	( )	( )	( )	( )	( )	( )
_____	_____	_____	( )	( )	( )	( )	( )	( )	( )
_____	_____	_____	( )	( )	( )	( )	( )	( )	( )

11

#### OTHER WORK REQUIRED

12

#### DESCRIPTION

REMARKS:

13

AHTD INSPECTOR SIGNATURE: \_\_\_\_\_ 14 \_\_\_\_\_ TITLE \_\_\_\_\_ DATE: \_\_\_\_\_

I certify under penalty of law that this document was prepared under my direction or supervision. The information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

RES. ENGR. / DIST.MAINT. ENGR. SIGNATURE: \_\_\_\_\_ 15 \_\_\_\_\_ DATE: \_\_\_\_\_

NOTE: The Contractor, upon receipt of a copy of this Report, is hereby formally instructed to perform the above work within three (3) business days.

TO BE COMPLETED EVERY SEVEN (7) DAYS.

Distribution: Orig. - RE files, Copy - Field Office & Contractor\*

\* The Contractor is to receive a copy of this report immediately when work is required.

## **2008 EROSION AND SEDIMENT CONTROL DESIGN AND CONSTRUCTION MANUAL**

### **5.0 CONSTRUCTION ACTIVITIES BY OTHERS**

#### **5.1 UTILITY WORK**

Utility companies performing work both within and outside the right of way are responsible for developing and implementing their own Storm Water Pollution Prevention Plan's (SWPPP) and obtaining their own National Pollutant Discharge Elimination System (NPDES) Permits. The Department should work with the Utility to ensure that erosion and sediment are kept to a minimum and that the Utility complies with applicable permits.

On highway construction projects, the Department's Resident Engineer should first make every effort to have the responsible utility perform erosion control necessitated by utility adjustments whether on or off the right of way. The Resident Engineer should contact the Utilities Section, the District, and the Staff Construction Engineer if a utility fails to construct or maintain the necessary Best Management Practices (BMPs). The Resident Engineer may be required to direct the utility adjustment efforts be stopped until cooperation is obtained. If the utility work is on the right of way and a utility does not cooperate, the Resident Engineer may be required to authorize and instruct the Department's Contractor to perform necessary erosion control. This will not relieve the Utility of the NPDES General Construction Permit or agreement responsibilities.

When the Utility is working on the right of way other than within the limits of a highway construction project, Department personnel should monitor the erosion control efforts and contact the District if a utility fails to construct or maintain the necessary BMPs.

#### **5.2 OTHER ENTITIES, AGENCIES, AND INDIVIDUALS**

The Department often permits other entities, agencies and individuals to perform work within highway right of way. This work may be to provide improvements at intersections, improvements within the right of way associated with adjoining property development or other reasons. The other entity, agency, or individual is responsible for preparation, submittal, and execution of the SWPPP.

Department personnel should work through the District Permit Officer and District Staff to make every effort to have the responsible party perform erosion control resulting from their work within the right of way. The District Engineer may find it necessary to demand the work be stopped until the requirements of the NPDES General Construction Permit are met. This is not intended to relieve the permitted party from the NPDES General Construction Permit responsibilities.

The Department does not approve or inspect these operations. They are the responsibility of the other entity, agency, or individuals.

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### **5.3 OTHER ENTITIES AND AGENCIES WITH FUNDING THROUGH THE DEPARTMENT**

The Department is involved in funding of projects, often not within Department right of way, and does not perform day-to-day inspection of the work. The owner of the right of way or sponsor of the project inspects the work or hires a consultant to inspect the work. Examples of these types of projects are Enhancement Projects, Safe Routes to Schools projects, and other "owner inspected projects". For these types of projects, the responsible entity, normally the project sponsor and/or owner of the project right of way, is responsible for preparation, submittal, and execution of the SWPPP.

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**APPENDIX A**

**ABBREVIATIONS AND DEFINITIONS**

This list contains common abbreviations and definitions utilized in this Manual.

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**ABBREVIATIONS AND DEFINITIONS**

The following acronyms and definitions are used throughout the Manual and in design and implementation:

- ADEQ**      **Arkansas Department of Environmental Quality**  
The ADEQ is an Arkansas state agency. Arkansas is currently authorized by EPA to implement the NPDES. The Permit under which the Department operates was issued by the Arkansas Department of Environmental Quality (ADEQ), and became effective on November 1, 2008.
- BMP**      **Best Management Practice**  
A measure or practice used to reduce the amount of pollutants entering the waters of the United States. Use of BMP's is incorporated into the SWPPP.
- EPA**      **U. S. Environmental Protection Agency**  
The Federal agency responsible for, among other things, the oversight of the NPDES Program.
- Large Construction Site**  
The NPDES General Construction Permit requires that construction activities involving sites with five (5) or more acres of disturbed land i be covered by a NOI filed with the ADEQ and that a SWPPP be developed and fully implemented.
- Sites that disturb twenty (20) acres or more are considered large construction
- MS4**      **Municipal Separate Storm Sewer System**  
A system of conveyances, including roads with drainage systems, municipal streets, curbs, gutters, ditches, and storm drains, designed or used for collecting or conveying storm water.
- NOI**      **Notice of Intent**  
The NPDES General Construction Permit requires the Department to file a Notice of Intent (NOI) if the disturbed area is five or more acres. The NOI must be accompanied by the SWPPP and permit fee when it is submitted to ADEQ. When the NOI is signed and filed, the signer is agreeing to the terms of the permit.
- NOT**      **Notice of Termination**  
At least 30 days after all construction activities that disturb soil are complete, the site has reached final effective stabilization and all temporary BMPs have been removed, a Notice of Termination (NOT) must be filed with the ADEQ for Large Sites. The District Engineer normally signs and submits this form.

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- NPDES      National Pollutant Discharge Elimination System**  
A national program for issuing permits under the authorization of EPA or a State to discharge pollutants into Waters of the United States.
- Small Construction Site**  
The NPDES General Construction Permit requires that construction activities involving sites which disturb greater than one acre but less than five acres have a SWPPP developed and fully implemented but a NOI or NOT is not required.
- STAA      Short Term Activity Authorization**  
This permit is requested from ADEQ prior to the beginning of work. This provides short-term authorization to conduct approved work in Extraordinary Resource Waters, Ecologically Sensitive Waterbodies, Natural and Scenic Rivers, and impaired waters listed on ADEQ's 303(d) list for sediment.
- Standard Specifications**  
This is also referred to as the "Specifications". Both terms refer to the current edition of the AHTD Standard Specifications for Highway Construction.
- SWPPP      Storm Water Pollution Prevention Plan**  
The Permit requires that a SWPPP be developed for each construction site covered by the General Construction Permit. The SWPPP must use good engineering practices or Best Management Practices (BMP's) that reduce the pollution in storm water discharges. The SWPPP includes both permanent and temporary erosion control devices, procedures, restrictions, and other requirements set forth by ADEQ that must be followed.
- TMDL      Total Maximum Daily Load**  
The Permit requires that the SWPPP includes any documentation supporting a determination of Permit eligibility with regard to waters that have an established TMDL.
- Waters of the United States or Waters of the State**  
For all practical purposes, these terms refer to any natural or manmade body of water not built to catch sediment.

There are many other definitions and concepts contained in this Manual that personnel involved in the design and implementation of the SWPPP should become familiar.



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**APPENDIX B**

**BEST MANAGEMENT PRACTICES (BMP'S)**

The key to a successful Storm Water Pollution Prevention Plan is the selection of the appropriate erosion and sediment control devices and actions. Following is information on some of the more common Best Management Practices.

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### BEST MANAGEMENT PRACTICES (BMP'S)

#### A. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES

Temporary erosion and sediment control measures can be defined as those devices or procedures employed during construction to control erosion and sediment until such time that permanent protection can be provided. These temporary measures can be categorized into three general areas of effort.

-  Measures that provide direct protection to the soil surface (ground cover, channel liners, riprap, etc.)
-  Measures which tend to control the runoff pattern to an area of acceptable flow conditions (diversion ditches and slope drains)
-  Measures which serve to remove sediment from waters by filtering or slowing the velocity of the sediment laden water to such an extent that it can no longer keep the particles in suspension or moving along the channel bed (ditch checks, silt fences, sediment basins, etc.)

The following sections address the application and design criteria for the various temporary erosion control measures.

#### A.1 LIMITATION OF DISTURBED AREA

Section 110 of the Standard Specifications requires the Engineer to limit the amount of disturbed ground on each construction site to a maximum of 25 acres. The Engineer has the authority to increase or decrease this limit based upon the Contractor's capability to effectively control erosion and sediment on the disturbed areas and to contain sediment within the Right-of-Way area.

##### **Definition:**

Disturbed soil is defined as exposed bare soil denuded of vegetative cover or lacking stabilization. Stabilized soil is defined as soil that is covered by grass, seeded and mulched, mulched, covered by erosion control matting, or covered by permanent stabilization as shown on the plans or directed by the Engineer.

##### **Application:**

Limiting the amount of disturbed soils and minimizing the time of exposure should be applied to all projects as a primary objective to control erosion and sediment.

##### **Design Criteria:**

Unless modified on the plans or directed by the Engineer, the Standard Specifications limit the total surface area of disturbed soil on the right-of-way at any one time to a maximum of 25 acres. Design plans should take into consideration this limitation.

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-  The Engineer will have the authority to increase or decrease the limitation on surface area of disturbed land based upon the Contractor's capability to effectively control erosion and sedimentation on these areas and contain sediment within the Right-of-Way limits.
-  This limitation will include any area on the right-of-way that the contractor requests to utilize for his operations, such as borrow sites.
-  Disturbed areas that are temporarily abandoned shall be stabilized within 14 days unless work will be resumed within 21 calendar days.
-  Cut and fill slopes shall be stabilized in increments as construction progresses.
-  Completed areas shall receive permanent seeding, temporary seeding, or mulch cover within 14 days of completion.

### A.2 GROUND COVER

#### **Definition:**

Ground cover is vegetation, mulch, or a combination of both used to protect the soil from the erosive force of water.

#### **Application:**

Ground covers are used on disturbed areas that are not to final grade and will be exposed for a period of time, or in areas where seasonal limitations or a delay in final construction preclude permanent seeding. In areas of steep slopes or when mulch is applied during dry or cold periods and prompt vegetative establishment is not expected, mulch control netting should be considered. Ground covers are also to be used in areas at final grade that are erodable and will be exposed for an extended period of time.

#### **Design Criteria:**

-  Provide temporary seeding and mulch cover for entire area of disturbed soil.
-  Provide Erosion Control Matting for steep slopes (normally 2:1 or steeper) in selected problem areas.

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### A.3 TRACKING

#### **Definition:**

A method of surface roughening that is achieved by operating tracked machinery up and down the slope to leave horizontal depressions in the soil.

#### **Application:**

Tracking is used on all slopes for the following purposes:



To reduce runoff velocity and increase infiltration.



To reduce erosion and provide for sediment trapping (the formation of erosion rills is encouraged by tracking across the slope).



To aid in the establishment of vegetative cover with seed.

### A.4 DUST CONTROL

Section 110 of the Standard Specifications requires dust generation to be minimized. The following information provides some of the methods that may be used by the contractor to meet this requirement. The Contractor is not paid for this directly. Compensation for dust control is included in the unit prices for the various items of work in the contract (per Subsection 110.09 of the Standard Specifications For Highway Construction).

#### **Definition:**

Methods used to prevent surface and air movement of dust from exposed soil surfaces and reduce the presence of airborne substances that may present health hazards, traffic safety problems or harm animal or plant life.

#### **Application:**

In areas where dust may migrate off-site.

#### **Design Criteria:**

Several measures can be taken to control dust. Some commonly used measures include:



Irrigation – This is the most commonly used dust control practice. The site is sprinkled with water until the surface is wet. This offers fast protection for haul roads and other heavy traffic area.



Mulch – When properly applied, mulch offers a fast effective means of controlling dust. This is not recommended for areas with heavy traffic pathways.



Vegetative Covers –Undisturbed vegetation can be very helpful in dust control when left as buffers between work areas and protected areas.



Spray-on Adhesives – Many of the spray-on adhesives will withstand heavy traffic.

**NOTE:** Since this is not paid for directly, the method used for controlling dust is the Contractor's option. The Department's only concern is that the option utilized is effective.

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### A.5 EROSION CONTROL MATTING

#### **Definition:**

Erosion control matting consists of various types of materials used to allow the establishment of vegetative growth in an area of concentrated water flow.

#### **Application:**

Erosion control matting is used in ditches, swales, or channels where excessive or detrimental water flow velocities are encountered.

#### **Design Criteria:**

Choose type of erosion control matting consistent with the velocity and amount of water flow.

### A.6 DIVERSION DITCHES

#### **Definition:**

A diversion ditch is a temporary berm or berm and channel combination used to divert water flow.

#### **Application:**

Diversion ditches are to be used to intercept surface runoff and direct it to a desirable collection or discharge point. These ditches shall be constructed to intercept and divert flow away from disturbed areas. They should also be used within a disturbed area to control flow. Diversion ditches should be one of the first features installed on the construction site.

Diversion ditches can be used in the following situations:

-  Above disturbed existing slopes and above cut or fill slopes to prevent runoff over the slope.
-  Across unprotected slopes, as slope breaks, to reduce slope length.
-  Below slopes to divert excess runoff to stabilized outlets.
-  To divert sediment laden water to sediment basins.
-  At or near the perimeter of the construction area to keep sediment from leaving the site.

#### **Design Criteria:**

The design shall conform to FIGURE 2.01 unless a special design is required.

-  Maximum drainage area is 5 acres.

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Use special design if drainage area is greater than 5 acres.



Provide diversion ditches at top of embankments when fill height exceeds approximately 20 feet or in areas of erodible soils.



Diversion ditches used as perimeter controls should be located as to minimize damages by construction operation and traffic.



For diversion ditches at the top of cut slopes or in other designated areas, consider stabilization of ditch as follows:

### Channel Grade

0.5% -5%

5% -8%

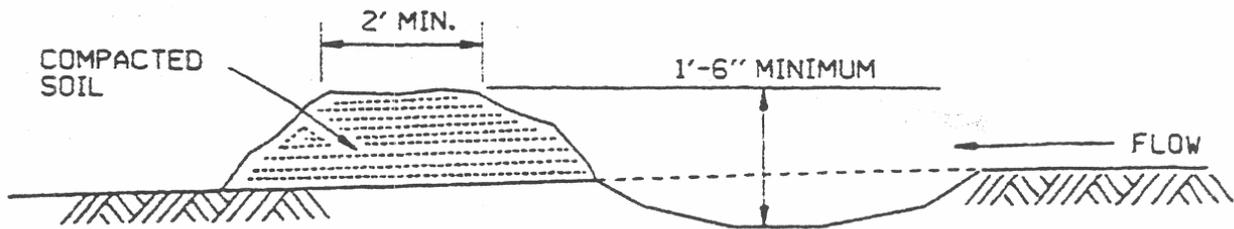
8%

### Type of Treatment

Seed and Mulch

Seed and Erosion Control Matting

Dumped Riprap



DIVERSION DITCH (E-8)

FIGURE A.01

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## A.7 SLOPE DRAINS

### Definition:

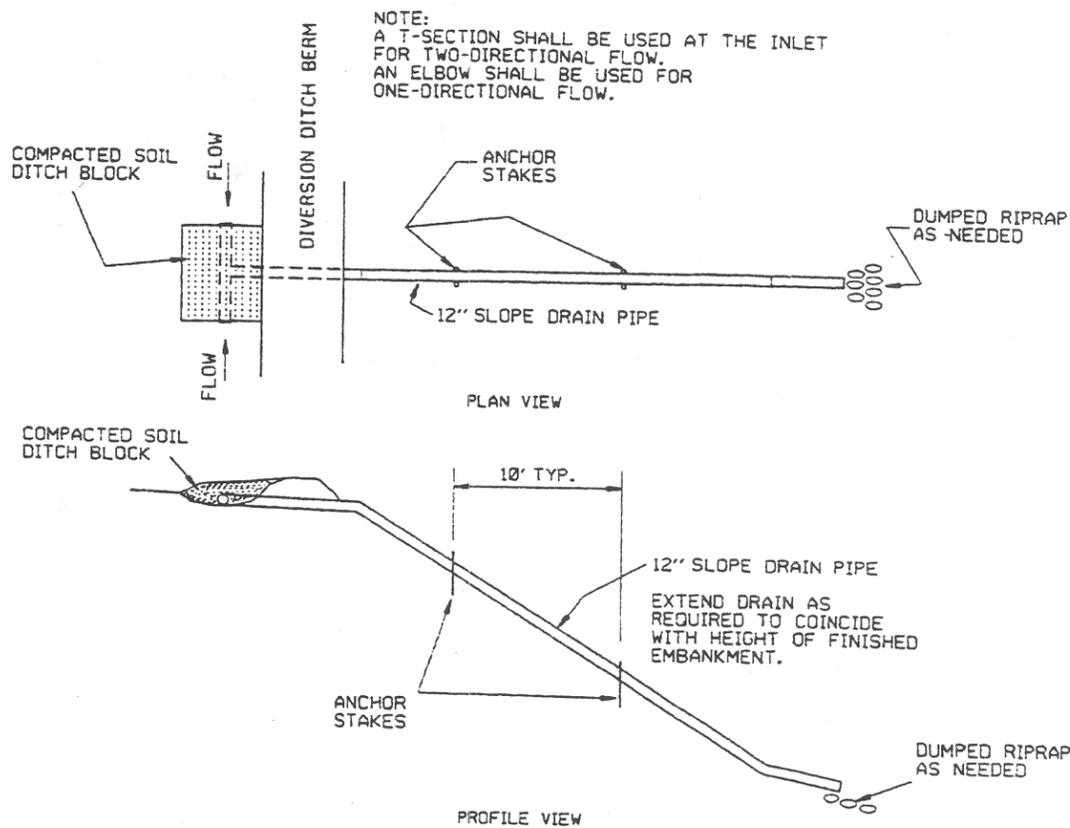
A slope drain is a device to confine and transport surface water from one elevation to another, normally down an unprotected slope.

### Application:

Slope drains are normally used as outlets for diversion ditches running along the top of fill slopes. Other uses could include conveying runoff from undisturbed areas across the construction site.

### Design Criteria:

-  The design shall conform to FIGURE 2.02 unless a special design is required.
-  Maximum drainage area is 5 acres.
-  Maximum spacing for draining diversion ditches is 500 ft.



SLOPE  
DRAIN  
(E-12)

FIGURE  
A.02

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### A.8 DITCH CHECKS

#### **Definition:**

Ditch checks are temporary barriers constructed of rock, sand bags, or baled straw placed across a natural or artificial channel.

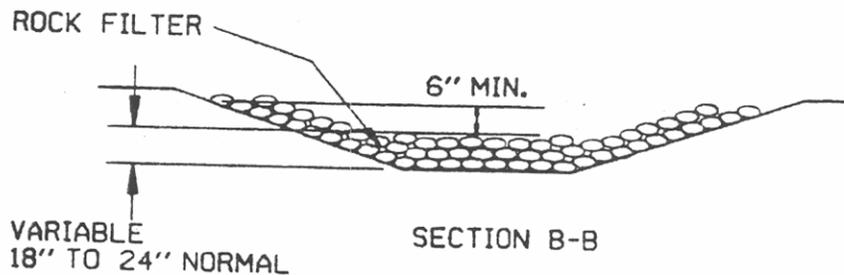
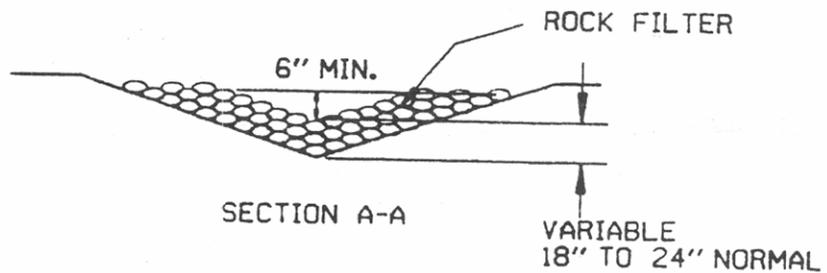
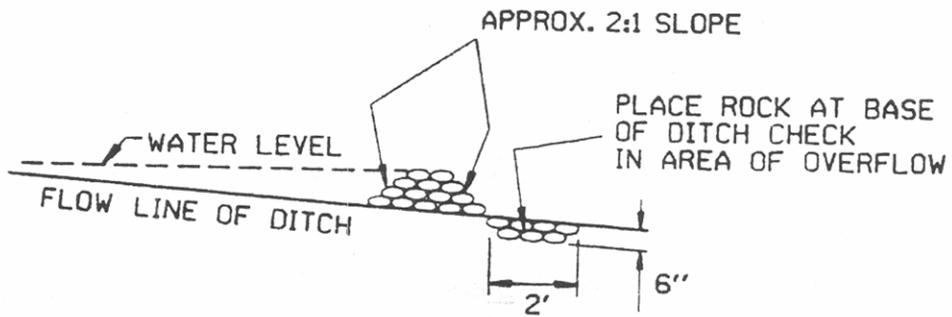
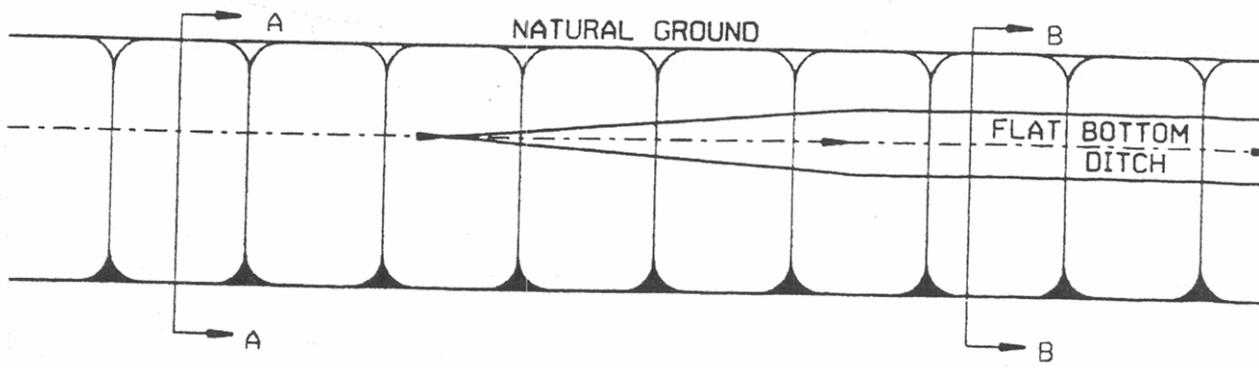
#### **Application:**

Ditch checks should be placed in drainage ditches to reduce the velocity of flow. Normally ditch checks will be required in ditches where vegetation has not yet been established. Baled straw ditch checks are to be used only in conjunction with other erosion control devices and should not be used in areas of concentrated flows. Ditch checks may be used as permanent devices in appropriate locations. Ditch checks should never be used in a live stream.

#### **Design Criteria:**

-  The design shall conform to FIGURES 2.03, 2.04, and 2.05 unless special designs are required.
-  Maximum drainage area is 10 acres.
-  In general, space so that the toe of the upstream ditch check is no higher than the top of the downstream ditch check.
-  Sediment removal and disposal is required for ditch checks whenever sediment has reduced the capacity by half.
-  Sediment basins may be excavated behind ditch checks to help trap additional sediment.
-  Baled straw ditch checks shall only be used in conjunction with sediment basins diversion ditches, other ditch checks, or other site-specific locations.

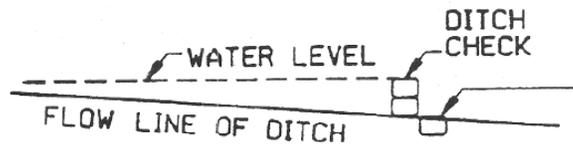
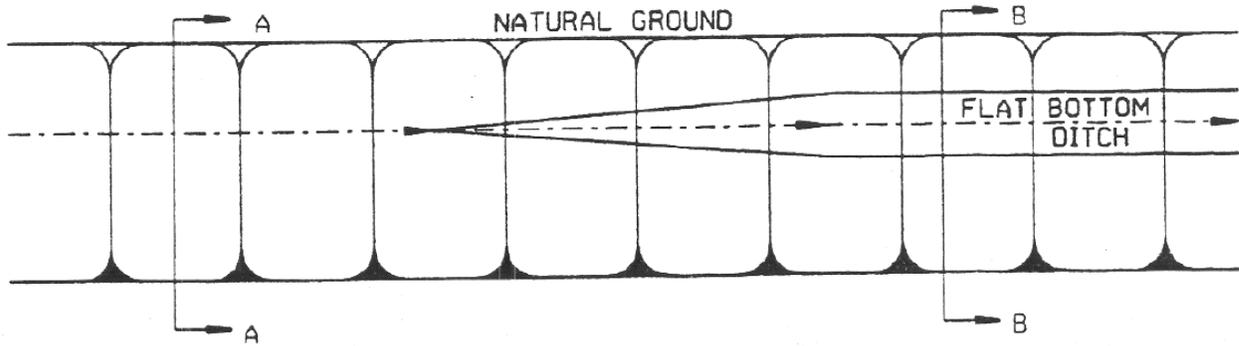
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**ROCK DITCH CHECK (E-6)**

**FIGURE A.03**

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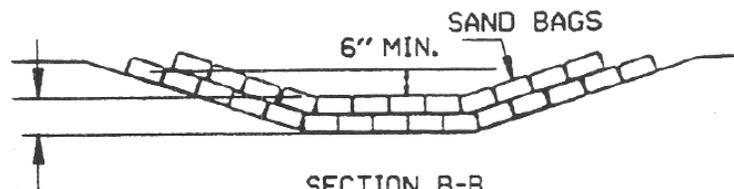
PLACE SAND BAGS  
AT BASE OF DITCH  
CHECK IN AREA OF  
OVERFLOW

NUMBER OF SAND BAGS  
AND ARRANGEMENT VARIABLE  
WITH ON-SITE CONDITIONS.



SECTION A-A

VARIABLE  
18" TO 24" NORMAL



SECTION B-B

VARIABLE  
18" TO 24" NORMAL

SAND BAG DITCH CHECK (E-5)

FIGURE A.04

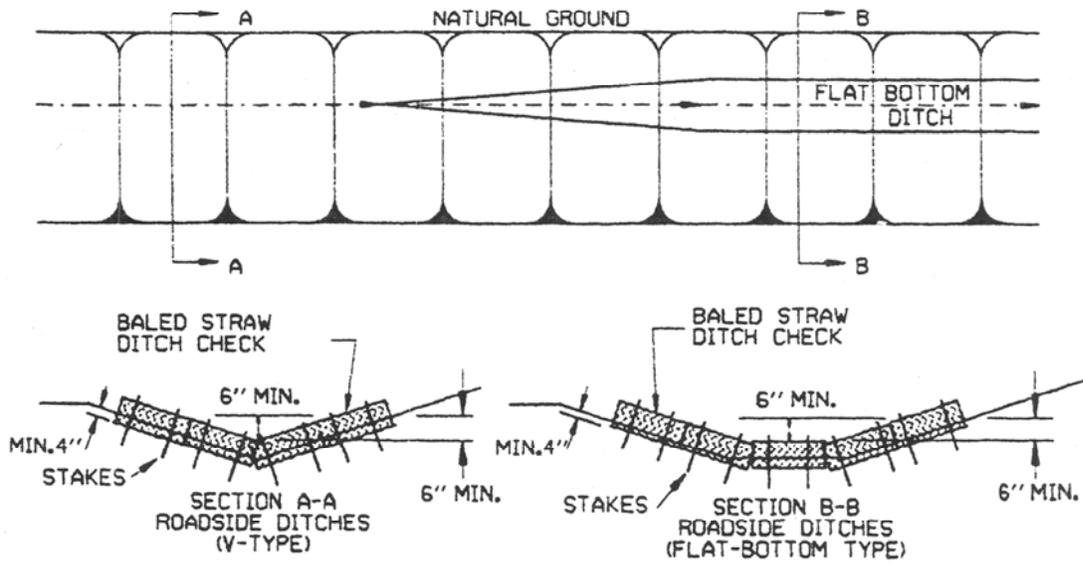
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**BALED  
STRAW  
DITCH  
CHECK  
(E-1)**

GENERAL NOTES

1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.
2. STRAW BALES SHALL BE KEYED INTO SOIL A MINIMUM OF 4' AND NO GAPS SHALL BE LEFT BETWEEN BALES.

NOTE:



Subsection 621.03(e) of the Specifications also allows “wiring and/or other methods” to secure Baled Straw Ditch Checks.

FIGURE A.05

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### A.9 SILT FENCE

#### **Definition:**

A silt fence is a vertical barrier of filter fabric used to contain sediment.

#### **Application:**

Silt fences are placed around drop inlets, at the toe of fill slopes, and along areas to be protected, such as natural streams, wetlands, and developed property. They are also used at the perimeter of a project to ensure that eroded sediment does not leave the site. Silt fence should NOT be utilized as a ditch check. Because of the pressure of water behind them, silt fences should not be used where large flows are expected and therefore should not be constructed in streams. Silt fence use should normally be limited to overland and sheet flows.

#### **Design Criteria:**

-  The design shall conform to FIGURE 2.06 or 2.07 unless a special design is required.
-  The design of a Drop Inlet Silt Fence shall conform to FIGURE 2.08 unless a special design is required.
-  The drainage area should not exceed 0.25 acre per 100 feet of barrier length.
-  The fence should follow the contour of the slope and have no dips or low areas where water will accumulate and pool. Pooled water is a major cause of failure because of the high pressure it places on the fence.
-  Ends of the fence should always be angled up slope so water cannot flow around them.
-  The maximum up slope grade perpendicular to the fence line should not exceed 1:1.
-  The drainage area for drop inlet silt fence should not exceed one acre.
-  Sediment removal and disposal is required when sediment covers 1/3 of the height of the fence.

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GEOTEXTILE FABRIC  
(TYPE 4) IN ACCORDANCE  
WITH SECTION 625

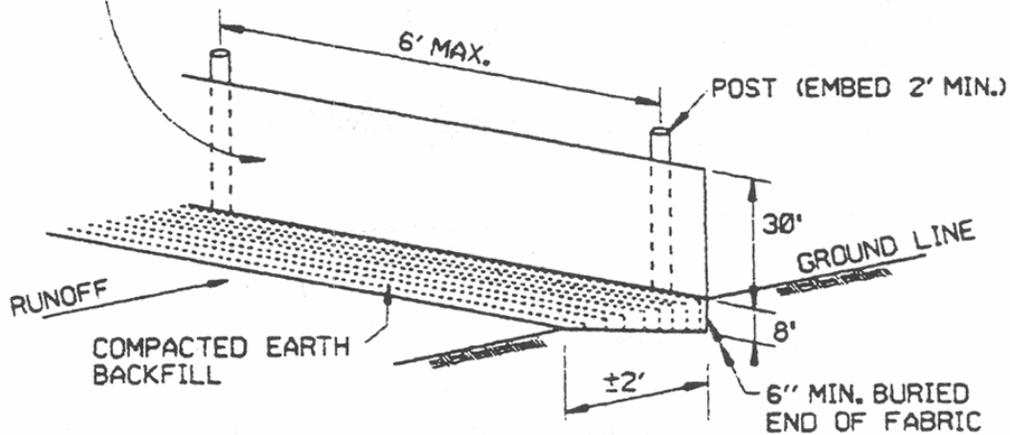


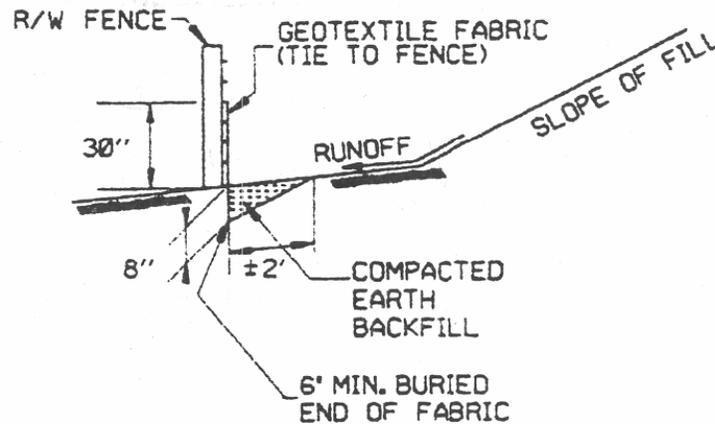
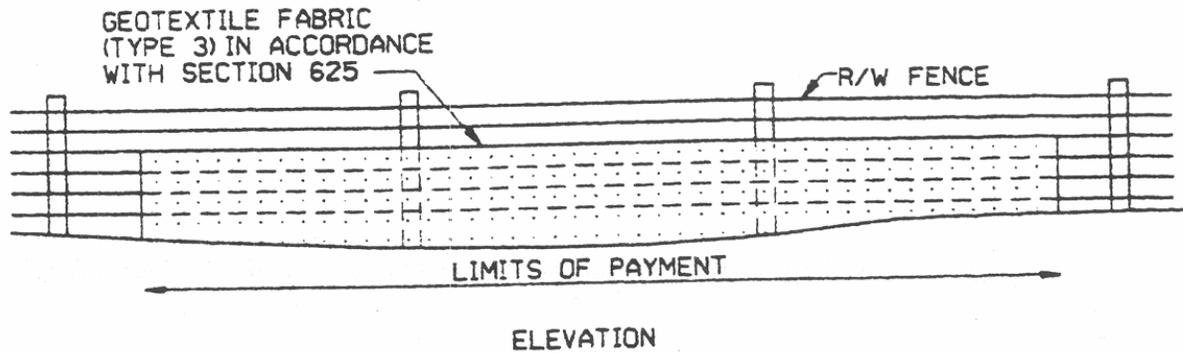
FIGURE  
A.06

SILT FENCE (E-11)

GENERAL NOTES

GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST, OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

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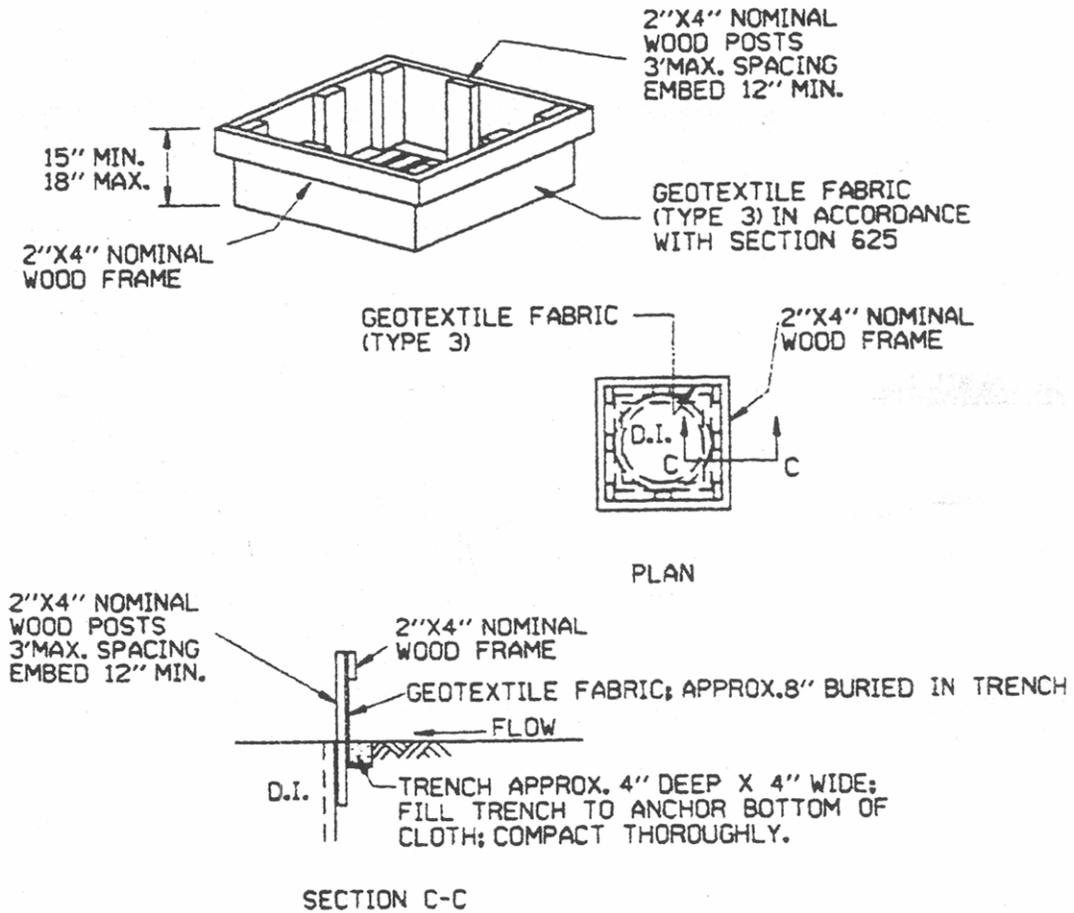
**SILT FENCE ON R/W FENCE (E-4)**

**GENERAL NOTES**

GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST, OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

**FIGURE A.07**

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DROP INLET SILT FENCE (E-7)

FIGURE A.08

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## A.10 SEDIMENT BASINS

### Definition:

A sediment basin is a water storage area provided by excavating a pond or by placing an earthen embankment across a low area or drainage swale.

### Application:

The General Construction Permit states that for common drainage locations that serve an area with 10 or more disturbed acres at one time, a temporary or permanent detention basin based on either the smaller of 3,600 cubic feet per acre, or a size based on the runoff volume of a 10 year, 24 hour storm, shall be provided where attainable until stabilization of the site.

Sediment basins are recommended at the following locations:

-  At the outlet or located periodically along excavated roadway ditches or diversion ditches.
-  At the end of drainage structures.
-  At the outlet of slope drains.
-  At any location deemed necessary to trap sediment laden water prior to discharge offsite or into a stream. Sediment basins should not be used in live streams.

Design Criteria:

-  The design shall conform to FIGURES 2.09, 2.10, or 2.11 unless a special design is required.
-  The capacity of the sedimentation pool should provide a storage volume for 3600 cubic feet per acre of drainage area.
-  The drainage area for each type of sediment basin is as follows:

<u>Sediment Basin Type</u>	<u>Drainage Area</u>
E-14	Less than 10 acres
E-9	10 to 20 acres
E-10	20 acres or greater
-  Sediment basins must be located and designed such that failure of the basin would not result in damage to homes, businesses, streets, or highways.

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☛ Sediment removal and disposal is required for all sediment basins whenever their capacity is reduced by half.

☛ If the SWPPP includes a temporary sediment basin, a plan for removal of the basin at the completion of construction must be included in the SWPPP.

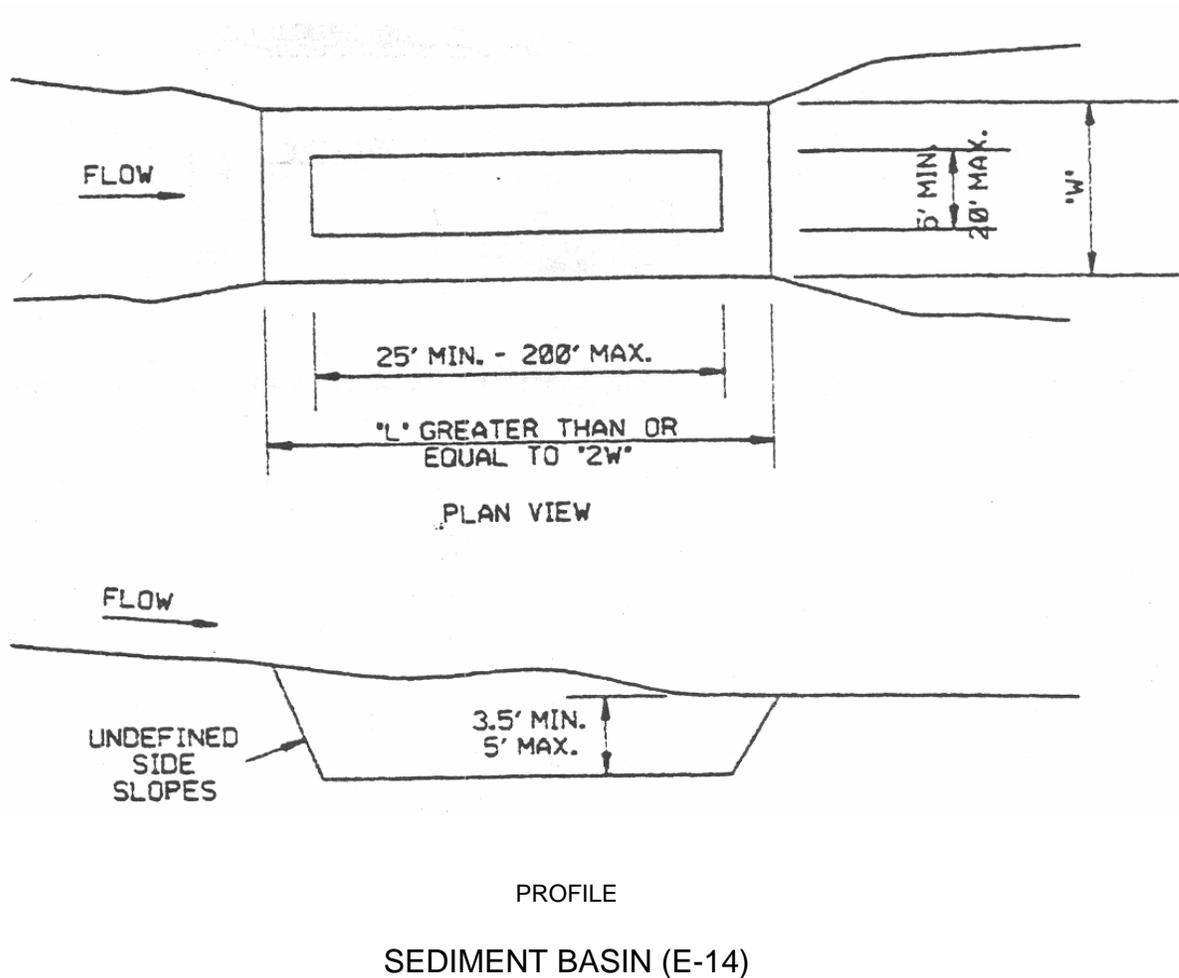


FIGURE A.09

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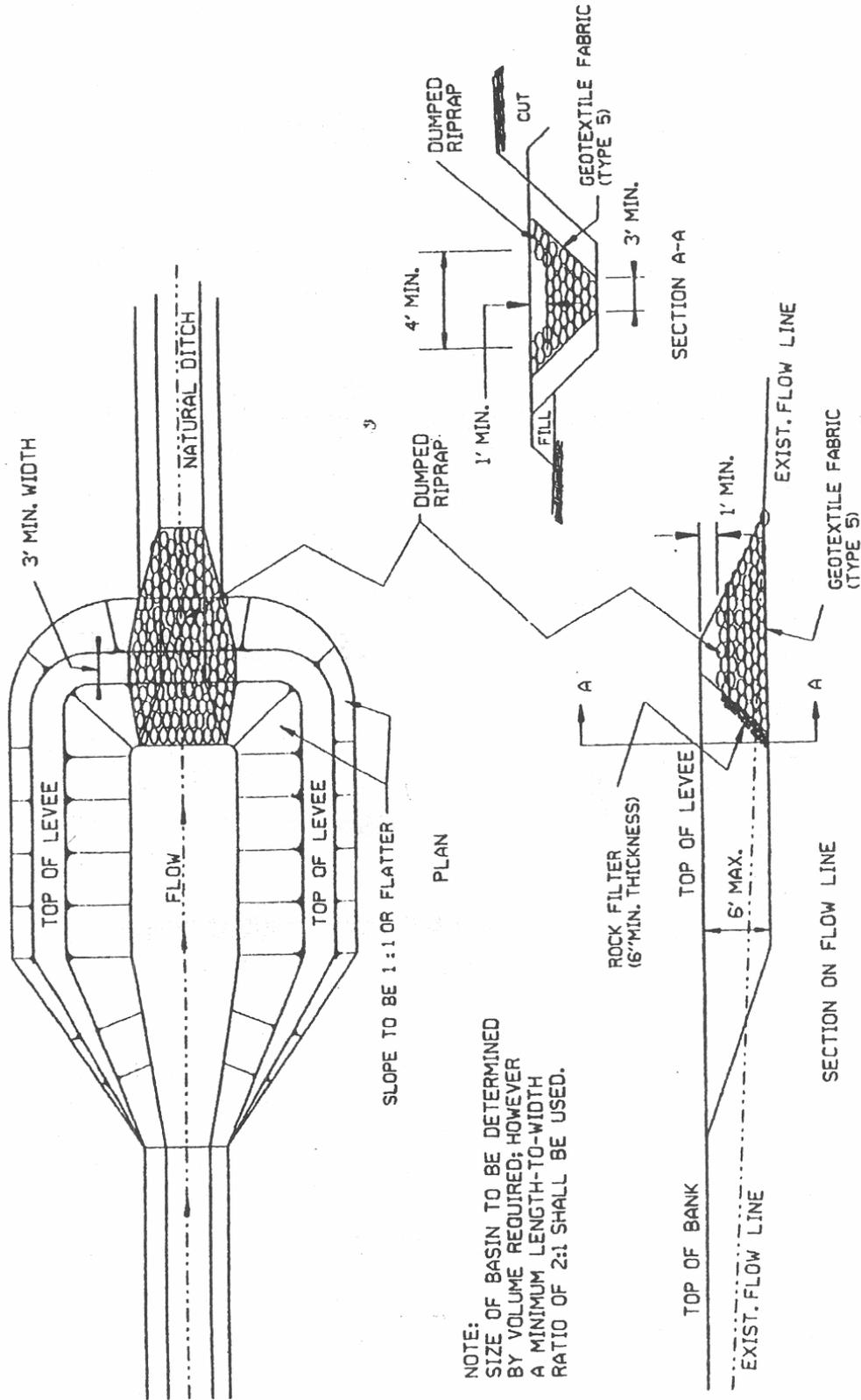
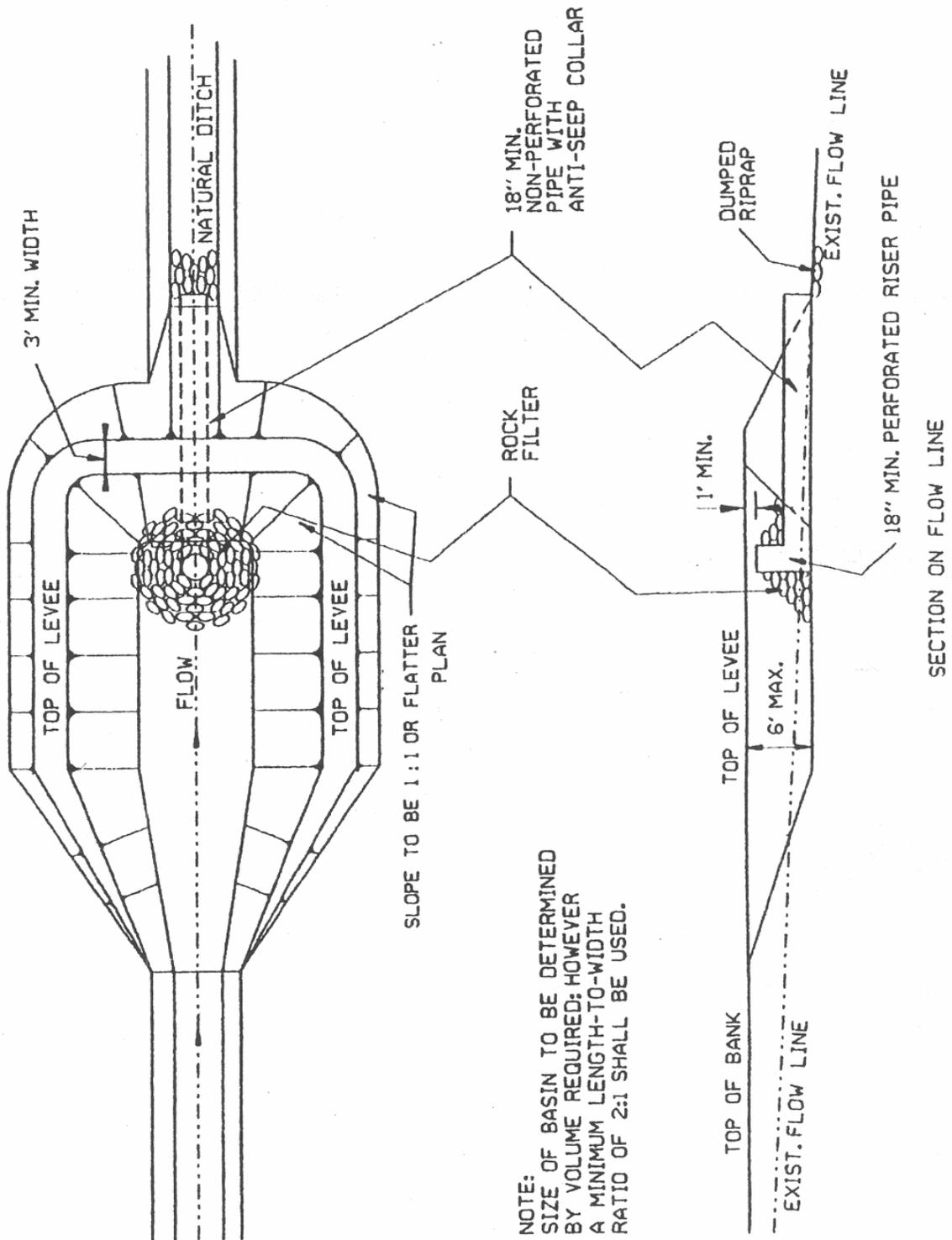


FIGURE A.10

SEDIMENT BASIN WITH RIPRAP OUTLET (E-9)

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NOTE:  
SIZE OF BASIN TO BE DETERMINED  
BY VOLUME REQUIRED; HOWEVER  
A MINIMUM LENGTH-TO-WIDTH  
RATIO OF 2:1 SHALL BE USED.

SEDIMENT BASIN WITH PIPE OUTLET (E-10)

FIGURE A.11

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### A.11 STABILIZED CONSTRUCTION ENTRANCE

Both Section 110 of the Standard Specifications For Highway Construction and the General NPDES Permit require that off-site tracking of sediment be minimized. The following information may be used to meet this requirement.

NOTE: The actual design and expense of stabilization of entrances to prevent tracking of material off-site is the responsibility of the Contractor. The main criteria are that these be installed - when needed - and work satisfactorily at all times.

#### **Definition:**

A stabilized construction entrance is used to reduce the amount of soil being tracked off-site.

#### **Application:**

Whenever traffic will be moving directly onto a public road or other paved areas.

#### **Design Criteria:**

Stabilized construction entrances are to be provided if off-site tracking occurs or is reasonably anticipated, in which case construction traffic should not be allowed to move directly onto public areas other than at locations of stabilized exits.

An example of design criteria that has been known to be effective in “normal” instances which the Contractor might use is as follows:

-  Coarse aggregate (2-3 inch stone) should be used.
-  Entrance should have a minimum width of 12 feet extending the entire length of the entrance.
-  The entrance length should be AT LEAST 50 feet.
-  Filter cloth should be used below the coarse aggregate.
-  If conditions exist such that a majority of mud is not removed by the vehicles traveling over the stone, then the tires of the vehicles should be washed before entering the public road.
-  If slope towards the exiting end of the entrance exceeds 2 percent, a 6 to 8-inch high rise with 3:1 side slopes should be constructed across the entire width of the entrance to divert runoff away from the exiting end of the entrance. This berm should be approximately 15 feet from the exit end.

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## B. PERMANENT EROSION AND SEDIMENT CONTROL MEASURES

Permanent control measures are those design features that are incorporated into a project to control long-term sediment in the project area. These permanent measures include, but are not limited to the following:

	Vegetative Cover
	Slope Design
	Channel Linings
	Culverts
	Underdrains

The following sections address these permanent features.

### B.1 VEGETATIVE COVER

A good vegetative cover is one of the best erosion control measures available. Its ability to absorb the energy from falling rain and to hold soil together through extensive root systems makes it of primary importance. The best vegetative cover is preserved vegetation.

Methods to provide vegetative cover consist of seeding with mulch cover, sod mulch with overseeding, and solid sodding. Each project should be evaluated to determine the best method of application.

Stripping and stockpiling of topsoil to be spread over slopes prior to the placement of permanent vegetation should be considered where practical. In some cases additional topsoil from off the job site may be necessary.

A uniform perennial **vegetative cover with a density of at least 70%** (or other permanent stabilization measures such as riprap) must be established on unpaved areas before final stabilization is considered to be achieved and the Notice of Termination (NOT) can be filed.

### B.2 SLOPE DESIGN

Roadway embankment or cut slopes vary with the height of cut or fill and, depending on the erosiveness of the materials involved, can directly affect erosion control and revegetation measures. While flat slopes (2:1 or flatter) facilitate the establishment and maintenance of vegetation, they do increase the total surface area that is subject to erosion. However, experience has shown that the advantages of the slope flattening outweigh the disadvantages of the additional exposed area. Benching is an effective method of breaking and controlling sheet flow on long steep slopes.

Flat slopes allow better compaction of the fill surface reducing slump problems and slide potential in cut sections. Serrated cuts have been utilized in decomposed or fragmented rock to provide areas in which vegetation can become established.

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### **B.3 CHANNEL LININGS**

Channel linings should be considered when expected velocity, depth of flow, and/or particular geometric channel features are such that a scour problem would be anticipated.

Channel linings may consist of erosion control matting, solid sod, concrete paving, and/or rock riprap. In areas of high flow and high velocities flexible liners such as riprap should be considered in lieu of concrete paving. Consideration should be given to specifying a stone larger than dumped riprap where velocities are excessive.

Sharp bends and sudden changes to steeper gradients should be avoided since these conditions increase the scour potential of the channel.

### **B.4 CULVERTS**

Culverts generally constrict flood flows and increase velocities, giving a much higher than normal erosion potential for a particular site. In many instances, erosion and scour at culvert crossings are damaging to either the highway embankment, the structure itself, or the downstream channel if not designed and protected properly. A good indication of the need for outlet protection at culverts is the performance of other culverts in the area.

Selection of a structure size may be dependent on acceptable outlet velocities. The outlet velocity should be determined and where a potential for erosion at the outlet exists, proper protective measures should be taken. This protective measure usually consists of reduction of the velocity by means of some energy dissipation device or the provision for a channel lining protection.

Culverts should be located to minimize channel changes where practical. The invert grade of the culvert should closely match that of the natural channel.

### **B.5 UNDERDRAINS**

Subsurface water is a frequent cause of landslides, unstable shoulders, and other soil disturbances that contribute to the surface water erosion problem. Underdrain systems can alleviate these unstable conditions by preventing sloping soils from becoming excessively wet and subject to sloughing.

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### C. GOOD HOUSEKEEPING

The NPDES permit also restricts discharge of wastes. Among the Contractor procedures and Resident Engineer responsibilities in this area are:

-  Ensure that storage areas are kept clean and spills cleaned up and reported in conformance with the applicable Material Safety Data Sheet (MSDS), and standard specifications.
-  Ensure that used oil, transmission fluid, etc. expended when servicing equipment are disposed of properly, not discharged on the job site.
-  Ensure that wash water from concrete ready-mix trucks is emptied into a contained area designated for that purpose, i.e., an excavation or some other contained area where the wash water cannot leave the site. Never near or into a waterbody or ditch.
-  Ensure that the Contractor properly disposes of concentrated waste water resulting from concrete pavement grinding. This material cannot be discharged near waterbodies or ditches. Due to the high pH of the material, it can be classified as hazardous, especially in large amounts. If an area is being considered for disposal of this material, be sure to provide the information to the Environmental Division when obtaining off-site clearance.
-  Ensure that flammable “trade waste” (i.e., lumber, plywood, etc.) are NOT disposed of by burning unless used for warming in a “burn barrel”.
-  Ensure that material spills are cleaned up and disposed of properly. Spills of "reportable" quantities of hazardous substances must be reported to ADEQ.
-  Inspect Contractor materials, stockpiles, petroleum and other pollutants located on the R/W and ensure that adequate measures are taken to prevent their discharge. Use of containment berms in fueling and maintenance areas and where the potential for spills is high is recommended. Storage of these materials in a floodplain must be limited by the Resident Engineer. If unsure about the Contractor's proposed storage location, the Department’s Environmental Division is available for consultation.
-  “Normal” inspection of the Contractor’s housekeeping procedures.

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### D. CONCRETE WASTE MANAGEMENT

Discharge of surplus concrete, concrete wash water, or water containing concentrated concrete grinding material is considered an illegal discharge unless these discharges are properly addressed by the construction plans and documented in the SWPPP.

Section 110.07(b)(3) of the Standard Specifications For Highway Construction requires that the Engineer designate and document specific area(s) in the SWPPP for the discharge of surplus concrete, concrete wash water, and concrete grinding material. These areas cannot be located where the discharge can enter a nearby waterbody, or leave the construction site either directly or with storm water runoff. The following information provides some of the methods that may be used by the contractor to meet this requirement.

#### Definition:

These are procedures and practices that are designed to minimize or eliminate the discharge of concrete waste materials to the storm drain systems or nearby waterbodies.

#### Application:

-  On construction sites where concrete is used as a construction material or where concrete dust and debris result from demolition activities.
-  Where slurries containing concrete are generated, such as from sawcutting, coring, grinding, grooving, and hydro-concrete demolition.
-  Where concrete trucks or other concrete-coated equipment are washing on site.

#### Design Criteria:

-  Perform washout of concrete mixers, delivery trucks and other delivery systems in designated area only.
-  Temporary concrete washout facilities shall be located a minimum of 50 feet from storm drain inlets, open drainage facilities, and Waterbodies unless determined infeasible by the Engineer. Each facility is to be located away from construction traffic or access areas to prevent disturbance or tracking.
-  Temporary concrete washout facilities should be constructed above grade or below grade at the option of the contractor. Temporary concrete washout facilities must be constructed and maintained in sufficient quantity and size to contain all liquid and concrete waste generated by washout operations. Temporary concrete washout facilities should be maintained to provide adequate holding capacity. (A minimum freeboard of 4 inches for above ground facilities and 12 inches for below ground facilities is recommended.)
-  Washout may be collected in an impermeable bag or other impermeable containment devices for disposal.
-  Once concrete wastes are washed into the designated area and allowed to harden, the concrete may be broken up, removed and disposed of.

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-  It is recommended that significant concentrated residue from saw cutting, coring, and grinding operations be picked up by means of a vacuum device. This concentrated residue is not to be allowed to flow across the pavement and cannot be left on the surface of the pavement.
-  Concentrated concrete slurry residue can be temporarily stored in a facility as described above, or within an impermeable containment vessel.



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**APPENDIX C**

**NPDES GENERAL CONSTRUCTION PERMIT**

This is the source document containing the requirements under which the Department and the Contractor are legally obligated to follow.

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**AUTHORIZATION TO DISCHARGE STORMWATER UNDER  
THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE  
ARKANSAS WATER AND AIR POLLUTION CONTROL ACT**

In accordance with the provisions of the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended, Ark. Code Ann. 8-4-101 et seq.), and the Clean Water Act (33 U.S.C. 1251 et seq.),

**Operator of Facilities with Stormwater Discharges Associated With Construction Activity**

is authorized to discharge to all receiving waters except as stated in Part I.B.11 (Exclusions).

For facilities that are eligible for coverage under this General Permit (GP), the Department sends a cover letter (Notice of Coverage with tracking permit number which starts with ARR15) and a copy of the permit to the facility. The cover letter includes the Department's determination that a facility is covered under the GP and may specify alternate requirements outlined in the permit.

The responses to comments related to this permit are available as a separate document on the Department's website.

Issue Date: October 31, 2008

Effective Date: November 1, 2008

Expiration Date: October 31, 2011



\_\_\_\_\_  
Steven L. Drown  
Chief, Water Division  
Arkansas Department of Environmental Quality

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## PART I PERMIT REQUIREMENTS

Information in **Part I** is organized as follows:

**Section A:** Definitions

**Section B:** Coverage Under this Permit:

1. Permitted Area
2. Eligibility
3. Responsibilities of the Operator
4. Where to submit
5. Requirements for Qualifying Local Program (QLP)
6. Requirements for Coverage
7. Notice of Intent (NOI) Requirements
8. Posting Notice of Coverage (NOC)
9. Applicable Federal, State or Local Requirements
10. Allowable Non-Stormwater Discharges
11. Limitations on Coverage (Exclusions)
12. Trench and Ground Water Control
13. Buffer Zones
14. Waivers from Permit Coverage
15. Continuation of the Expired General Permit
16. Notice of Termination (NOT)
17. Responsibilities of the Operator of a Larger Common Plan of Development for a Subdivision
18. Change in Operator
19. Late Notifications
20. Failure to Notify
21. Maintenance
22. Releases in Excess of Reportable Quantities
23. Attainment of Water Quality Standards

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## SECTION A: DEFINITIONS

1. "ADEQ" or "Department" is referencing the Arkansas Department of Environmental Quality. The Department is the governing authority for the National Pollutant Discharge Elimination System program in the state of Arkansas.
2. "Arkansas Pollution Control and Ecology Commission" shall be referred to as APCEC throughout this permit.
3. "Automatic Coverage" indicates those sites that are defined as a small construction site or a site that is less than five (5) acres but part of a larger common plan.
4. "Best Management Practices (BMPs)" schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. According to the EPA BMP manual the use of hay-bales in concentrated flow areas is not recommended as a best management practice.
5. "Commencement of Construction" the initial disturbance of soils associated with clearing, grading, or excavating activities or other construction activities.
6. "Contaminated" means a substance the entry of which into the MS4, Waters of the State, or Waters of the United States may cause or contribute to a violation of Arkansas water quality standards.
7. "Control Measure" as used in this permit, refers to any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to waters of the State.
8. "Construction Site" an area upon which one or more land disturbing construction activities occur that in total will disturb one acre or more of land, including areas that are part of a larger common plan of development or sale where multiple separate and distinct land disturbing construction activities may be taking place at different times on different schedules but under one plan such that the total disturbed area is one acre or more.
9. "CWA" the Clean Water Act or the Federal Water Pollution Control Act.
10. "Dedicated Portable Asphalt Plant" a portable asphalt plant that is located on or contiguous to a construction site that provides asphalt only to the construction site on which the plant is located or adjacent to. The term does not include facilities that are subject to the asphalt emulsion effluent guideline limitations at 40 CFR Part 443.
11. "Dedicated Portable Concrete Plant" a portable concrete plant that is located on or contiguous to a construction site and that provides concrete only to the construction site on which the plant is located on or adjacent to.
12. "Detention Basin" a detention basin is an area where excess stormwater is stored or held temporarily and then slowly drains when water levels in the receiving channel recede. In essence, the water in a detention basin is temporarily detained until additional room becomes available in the receiving channel.
13. "Director" the Director, Arkansas Department of Environmental Quality, or a designated representative.
14. "Discharge" when used without qualification means the "discharge of a pollutant".
15. "Discharge of Stormwater Associated with Construction Activity" as used in this permit, refers to a discharge of

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pollutants in stormwater runoff from areas where soil disturbing activities (e.g., clearing, grading, or excavation), construction materials or equipment storage or maintenance (e.g., fill piles, borrow area, concrete truck washout, fueling), or other industrial stormwater directly related to the construction process (e.g., concrete or asphalt batch plants) are located.

16. "**Discharge-Related Activities**" as used in this permit, include: activities that cause, contribute to, or result in stormwater point source pollutant discharges, including but not limited to: excavation, site development, grading and other surface disturbance activities; management of solid waste and debris; and measures to control stormwater including the construction and operation of BMPs to control, reduce or prevent stormwater pollution.

17. "**Disturbed area**" the total area of the site where any construction activity is expected to disturb the ground surface. This includes any activity that could increase the rate of erosion, including, but not limited to, clearing, grubbing, grading, excavation, demolition activities, haul roads, and areas used for staging. Also included, are stockpiles of topsoil, fill material and any other stockpiles with a potential to create additional runoff.

18. "**Eligible**" qualified for authorization to discharge stormwater under this general permit.

19. "**Erosion**" the process by which the land's surface is worn away by the action of wind, water, ice or gravity.

20. "**Facility**" or "**Activity**" any NPDES "point source" or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the NPDES program.

21. "**Final Stabilization**":

A. All soil disturbing activities at the site have been completed and either of the two following criteria are met:

- 1) A uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 80% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or
- 2) Equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

B. When background native vegetation will cover less than 100% of the ground (e.g., arid areas, beaches), the 80% coverage criteria is adjusted as follows: if the native vegetation covers 50% of the ground, 80% of 50% ( $0.80 \times 0.50 = 0.40$ ) would require 40% total cover for final stabilization. On a beach with no natural vegetation, no stabilization is required.

C. For individual lots in residential construction, final stabilization means that either:

- 1) The homebuilder has completed final stabilization as specified above, or
- 2) The homebuilder has established temporary stabilization including perimeter controls for an individual lot prior to occupation of the home by the homeowner and informing the homeowner of the need for, and benefits of, final stabilization.

D. For construction projects on land used for agricultural purposes (e.g., pipelines across crop or range land, staging areas for highway construction, etc.), final stabilization may be accomplished by returning the disturbed land to its pre-construction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer

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strips immediately adjacent to “water of the United States”, and areas which are not being returned to their pre-construction agricultural use must meet the final stabilization criteria in A, B, or C above.

22. "**Infrastructure**" streets, drainage, curbs, utilities, etc.
23. "**Impaired Water**" a water body listed in the current, approved Arkansas 303(d) list.
24. "**Landscaping**" improving the natural beauty of a piece of land (i.e. entrance of subdivision) through plantings or altering the contours of the ground.
25. "**Large and Medium Municipal Separate Storm Sewer System**" all municipal separate storm sewer systems that are either:
  - A. Located in an incorporated place with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census: or
  - B. Located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal, separate storm sewers that are located in the incorporated places, townships or towns within such counties; or
  - C. Owned or operated by a municipality other than those described in paragraphs (i) or (ii) and that are designated by the Director as part of the large or medium municipal separate storm sewer system.
26. "**Large Construction Site**" Construction activity including clearing, grading and excavation, **except** operations that result in the disturbance of less than five acres of total land area. Construction activity also includes the disturbance of less than five acres of total land area that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb five acres. (Please see Part I.B.14 for partial waivers.)
27. "**Larger Common Plan of Development**" a contiguous (sharing a boundary or edge; adjacent; touching) area where multiple and distinct construction activities may be taking place at different times on different schedules under one plan. Such a plan might consist of many small projects (e.g. a common plan of development for a residential subdivision might lay out the streets, house lots, and areas for parks, schools and commercial development that the developer plans to build or sell to others for development.) All these areas would remain part of the common plan of development or sale. The following items can be used as guidance for deciding what might or might not be considered a “Common Plan of Development or Sale.” The “plan” in a common plan of development or sale is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating construction activities may occur on a specific plot. You must still meet the definition of operator in order to be required to get permit coverage, regardless of the acreage you personally disturb.

If a smaller project (i.e., less than 1 acre) is part of a large common plan of development or sale (e.g., you are building a residential home on a ½ acre lot in a 40 acre subdivision or are putting in a fast food restaurant on a ¼ acre pad that is part of a 20 acre retail center) permit coverage is required. Under 40 CFR 122.26(b)(2)(vi), smaller parts of a larger common plan of development are automatically authorized under this general permit and should follow the conditions of a site with automatic coverage set forth in this permit (see Part I.B.6.A).
28. "**NOC**" Notice of Coverage
29. "**NOI**" Notice of Intent to be covered by this permit.

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30. "**NOT**" Notice of Termination.

31. "**Operator**" for the purpose of this permit and in the context of stormwater associated with construction activity, means any person (an individual, association, partnership, corporation, municipality, state or federal agency) who has the primary management and ultimate decision-making responsibility over the operation of a facility or activity. The operator is responsible for ensuring compliance with all applicable environmental regulations and conditions.

In addition, for purposes of this permit and determining who is an operator, "owner" refers to the party that owns the structure being built. Ownership of the land where construction is occurring does not necessarily imply the property owner is an operator (e.g., a landowner whose property is being disturbed by construction of a gas pipeline or a landowner who allows a mining company to remove dirt, shale, clay, sand, gravel, etc. from a portion of his property). Likewise, if the erection of a structure has been contracted for, but possession of the title or lease to the land or structure is not to occur until after construction, the would-be owner may not be considered an operator (e.g., having a house built by a residential homebuilder).

32. "**Outfall**" a point source where stormwater leaves the construction site.

33. "**Owner**" the owner or operator of any "facility or activity" subject to regulation under the NPDES program. In addition, for purposes of this permit and determining who is an operator, "owner" refers to the party that owns the structure being built. Ownership of the land where construction is occurring does not necessarily imply the property owner is an operator (e.g., a landowner whose property is being disturbed by construction of a gas pipeline). Likewise, if the erection of a structure has been contracted for, but possession of the title or lease to the land or structure is not to occur until after construction, the would-be owner may not be considered an operator (e.g. having a house built by a residential homebuilder).

34. "**Physically Interconnected**" that one municipal separate storm sewer system is connected to a second municipal separate storm sewer system in such a way that it allows for direct discharges into the second system.

35. "**Point Source**" any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

36. "**Qualified Local Program**" is a municipal program for stormwater discharges associated with construction sites that has been formally approved by the Department.

37. "**Qualified personnel**" a person knowledgeable in the principles and practice of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact stormwater quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of stormwater discharges from the construction activity.

38. "**Regulated Small Municipal Separate Storm Sewer System**" all municipal separate storm sewer systems that are either:

- A. Located within the boundaries of an "urbanized area" with a population of 50,000 or more as determined by the latest Decennial Census by the Bureau of Census; or
- B. Owned or operated by a municipality other than those described in paragraph A and that serve a jurisdiction with a population of at least 10,000 and a population density of at least 1,000 people per square mile; or
- C. Owned or operated by a municipality other than those described in paragraphs A and B and that contributes substantially to the pollutant loadings of a "physically interconnected" municipal separate storm sewer system.

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39. "**Retention Basin**" a basin that is designed to hold the stormwater from a rain event and allow the water to infiltrate through the bottom of the basin. A retention basin also stores stormwater, but the storage of the stormwater would be on a more permanent basis. In fact, water often remains in a retention basin indefinitely, with the exception of the volume lost to evaporation and the volume absorbed into the soils. This differs greatly from a detention basin, which typically drains after the peak of the storm flow has passed, sometimes while it is still raining.
40. "**Runoff Coefficient**" the fraction of total rainfall that will appear at the conveyance as runoff.
41. "**Sediment**" material that settles to the bottom of a liquid.
42. "**Sediment Basin**" a basin that is designed to maintain a 10 year-24 hour storm event for a minimum of 24-hours in order to allow sediment to settle out of the water.
43. "**Small Construction Site**" Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than one acre and less than five acres. Small construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one and less than five acres. Small construction activity does not include routine maintenance.
44. "**Stormwater**" stormwater runoff from rainfall, snow melt runoff, and surface runoff and drainage.
45. "**Stormwater Associated with Construction Activity**" the discharge from any conveyance which is used for collecting and conveying stormwater and which is directly related to construction activity.
46. "**Stormwater Pollution Prevention Plan (SWPPP or SWP3)**" a plan that includes site map(s), an identification of construction/contractor, activities that could cause pollutants in the stormwater, and a description of measures or practices to control these pollutants (BMPs).
47. "**Temporary Sediment Controls**" controls that are installed to control sediment runoff from the site. These could be silt fencing, rock check dams, etc.
48. "**Total Maximum Daily Load**" or "**TMDL**" the sum of the individual wasteload allocations (WLAs) for point sources and load allocations (LAs) for non-point sources and natural background. If receiving water has only one point source discharger, the TMDL is the sum of that point source WLA plus the LAs for any non-point sources of pollution and natural background sources, tributaries, or adjacent segments. TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measure.
49. "**Uncontaminated**" can not exceed the water quality standards as set forth in APCEC Regulation 2.
50. "**Urbanized Area**" the areas of urban population density delineated by the Bureau of the Census for statistical purposes and generally consisting of the land area comprising one or more central place(s) and the adjacent densely settled surrounding area that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile as determined by the latest Decennial Census by the Bureau of Census.

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## SECTION B: COVERAGE UNDER THIS PERMIT

### Introduction

This Construction General Permit (CGP) authorizes stormwater discharges from large and small construction activities that result in a total land disturbance of equal to or greater than one acre, where those discharges enter surface waters of the State or a municipal separate storm sewer system (MS4) leading to surface waters of the State subject to the conditions set forth in this permit. This permit also authorizes stormwater discharges from any other construction activity designated by ADEQ where ADEQ makes that designation based on the potential for contribution to an excursion of a water quality standard or for significant contribution of pollutants to waters of the State. This permit replaces the permit issued in 2003. The goal of this permit is to minimize the discharge of stormwater pollutants from construction activity. The Operator should make sure to read and understand the conditions of the permit. A copy of the General Stormwater Construction Permit is available on the ADEQ web site at [http://www.adeg.state.ar.us/water/branch\\_npdes/stormwater/construction/construction.htm](http://www.adeg.state.ar.us/water/branch_npdes/stormwater/construction/construction.htm). You may also obtain a hard copy by contacting the ADEQ's General Permits Section at (501) 682-0623.

1. **Permitted Area.** If a large or small construction activity is located within the State of Arkansas, the operator may be eligible to obtain coverage under this permit.
2. **Eligibility.** Permit eligibility is limited to discharges from "large" and "small" construction activity, or as otherwise designated by ADEQ. This general permit contains eligibility restrictions, as well as permit conditions and requirements. You may have to take certain actions to be eligible for coverage under this permit. In such cases, you must continue to satisfy those eligibility provisions to maintain permit authorization. If you do not meet the requirements that are a pre-condition to eligibility, then resulting discharges constitute unpermitted discharges. By contrast, if you are eligible for coverage under this permit and do not comply with the requirements of the general permit, you may be in violation of the general permit for your otherwise eligible discharges.
  - A. This general permit authorizes discharges from construction activities as defined in 40 CFR 122.26(a), 40 CFR 122.26(b)(14)(x), and 40 CFR 122.26(b)(15)(i).
  - B. This permit also authorizes stormwater discharges from support activities (e.g., concrete or asphalt batch plants, equipment staging yards, materials storage areas, excavated material disposal areas, borrow areas) provided:
    - 1) The support activity is directly related to a specific construction site that is required to have NPDES permit coverage for discharges of stormwater associated with the construction activity;
    - 2) The support activity is not a commercial operation serving multiple unrelated construction projects by different operators, and does not operate beyond the completion of the construction activity at the last construction project it supports;
    - 3) Pollutant discharges from support activity areas are minimized in compliance with conditions of this permit; and
    - 4) discharges from the support activity areas must be identified in a stormwater pollution prevention plan stating appropriate controls and measures for the area.
  - C. Other activities may be considered for this permit at the discretion of the Director as defined in 40 CFR 122.26(b)(15)(ii).
3. **Responsibilities of the Operator.** Permittees with operational control are responsible for compliance with all applicable terms and conditions of this permit as it relates to their activities on the construction site, including protection of endangered species and implementation of BMPs and other controls required by the SWPPP. Receipt of this general

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permit does not relieve any operator of the responsibility to comply with any other applicable federal, state or local statute, ordinance or regulation.

4. **Where to submit.** The operator shall submit a complete and signed NOI and SWPPP to the Department at the following address:

Arkansas Department of Environmental Quality  
Discharge Permits Section  
5301 Northshore Drive  
North Little Rock, AR 72118-5317

Or by electronic mail (Complete documents (NOI and SWPPP) must be submitted in PDF format) to:

[Water-permit-application@adeq.state.ar.us](mailto:Water-permit-application@adeq.state.ar.us) ;

NOTE: Notice of Coverage (NOC) will NOT be issued until payment has been received by ADEQ.

5. **Requirements for Qualifying Local Program (QLP).** The Department reviews and approves the QLP programs to ensure that they meet or supersede both state and federal requirements outlined in this permit and 40 CFR 122.44(s). ADEQ will review the QLP program at least every 5 years for recertification. If the Department approves a QLP, then the QLP requirements must at the minimum meet the Department's requirements. This would include all templates and forms.

If the small construction site is within the jurisdiction of a QLP, the operator of the small construction site is authorized to discharge stormwater associated with construction activity under QLP permit requirements only.

List of Qualifying Local Programs: A list of municipalities with Qualifying Local Programs is available at [http://www.adeq.state.ar.us/water/branch\\_npdes/stormwater/ms4.htm](http://www.adeq.state.ar.us/water/branch_npdes/stormwater/ms4.htm). At this time only the City of Hot Springs is meeting the ADEQ minimum requirements.

6. **Requirements for Coverage.**

- A. **Automatic Coverage.** An operator of each site with automatic coverage may discharge under this general permit without submitting a NOI, SWPPP and fee. Please note that all the permit conditions set forth must be followed. The Operator is responsible for ensuring that the site is in compliance with any changes or updates of this general permit, by either contacting ADEQ or reviewing the ADEQ website [http://www.adeq.state.ar.us/water/branch\\_npdes/stormwater/construction/construction.htm](http://www.adeq.state.ar.us/water/branch_npdes/stormwater/construction/construction.htm).
- B. **Large Construction Sites.** An operator of a large construction site discharging under this general permit must submit the following items at least two weeks prior to commencement of construction:
- 1) A Notice of Intent (NOI) in accordance with the requirements of Part I.B.7 of this permit.
  - 2) A complete Stormwater Pollution Prevention Plan (SWPPP) in accordance with the requirements of Part II.A of this permit.
  - 3) An initial permit fee must accompany the NOI under the provisions of APCEC Regulation No. 9. Subsequent annual fees will be billed by the Department until the operator has requested a termination of coverage by submitting a Notice of Termination (NOT). Failure to remit the required permit fee may be grounds for the Director to deny coverage under this general permit.
  - 4) Per Part I.B.14 of the permit, any single lot that are less than five (5) acres but part of a larger common plan

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greater than five (5) acres, are waived from the requirements of a large site and may be permitted under automatic coverage.

## **Permitted Ongoing Project:**

If you previously did receive authorization to discharge for your project under the 2003 CGP and you wish to obtain coverage under this permit, you must submit only an NOI within 60 days of the issuance date of this permit and update the existing SWPPP in accordance with Part II of this permit.

### **C. Coverage within a QLP**

An operator of a site with automatic coverage, as defined in this permit, shall comply with the requirements of the QLP which has jurisdiction over the site.

## **7. Notice of Intent (NOI) Requirements**

- A. **NOI Form.** Large Construction site operators who intend to seek coverage for stormwater discharge under this general permit must submit a complete and accurate ADEQ NOI form to the Department at least two weeks prior to coverage under this permit. The NOI form **must** be the current version obtained from the stormwater webpage indicated above in Part I.B.

If the NOI is deemed incomplete, the Department will notify the applicant with regard to the deficiencies by a letter, email, or phone within ten (10) business days of receipt of NOI. If the operator does not receive a notification of deficiencies from ADEQ's receipt of the NOI, the NOI is deemed complete. If the applicant does not provide the Department with the requested deficiencies within the deadline set by the Department, then the Department will return the NOI, fee and SWPPP back to the applicant.

- B. **Contents of the NOI.** The NOI form contains, at a minimum, the following information:

- 1) Operator (Permittee) information (name, address, telephone and fax numbers, E-mail address)
- 2) Whether the operator is a federal, state, private, public, corporation, or other entity
- 3) Application Type: New or renewal
- 4) Invoice mailing information (name, address, and telephone and fax numbers)
- 5) Project Construction site information (name, county, address, contact person, direction to site, latitude and longitude for the entrance of the site or the endpoints for linear project (in degrees, minutes, and seconds), estimated construction start date and completion date through site final stabilization, estimate of the total project acreage and the acreage to be disturbed by the operator submitting the NOI, type of the project (subdivision, school, etc), whether the project is part of a larger common plan of development.)
- 6) Discharge information (name of the receiving stream, ultimate receiving stream, name of municipal storm sewer system)
- 7) Endangered Species information
- 8) Previous/Current permit information
- 9) The Certification statement and signature of a qualified signatory person in accordance with 40 CFR 122.22, as adopted by reference in APCEC Regulation No. 6
- 10) The certification of the facility corporation
- 11) Other information (location of the SWPPP).

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- C. **Notice of Coverage (NOC).** Unless notified by the Director to the contrary, dischargers who submit a NOI in accordance with the requirements of this permit are authorized to discharge stormwater from construction sites under the terms and conditions of this permit two weeks after the date the NOI is deemed complete by ADEQ. If the NOC has not been received by the permittee two weeks after the date the NOI is deemed complete by ADEQ, the NOI should be posted until the NOC is received. Upon review of the NOI and other available information, the Director may deny coverage under this permit and require submittal of an application for an individual NPDES permit.

### 8. **Posting Notice of Coverage (NOC).**

- A. **Large Sites: NOC Posting for Large Construction Sites.** The posting for large construction sites shall be obtained from the Department only after the permittee has met the NOI, permit fee and complete SWPPP submittal to the Department for the coverage.
- B. **Automatic Coverage Sites.** The Automatic Coverage NOC for small sites and a single site less than five (5) acres but part of a larger common plan, as defined in Part I.A, can be obtained from the Water Division's Construction Stormwater webpage. Posting a NOC without a SWPPP is a violation of this permit.
- C. **Linear Projects.** If the construction project is a linear construction project (e.g., pipeline, highway, etc.), the notice must be placed in a publicly accessible location near where construction is actively underway and moved as necessary.

Please note, this permit does not provide the public with any right to trespass on a construction site for any reason, including inspection of a site; nor does this permit require that the permittee allow members of the public access to a construction site.

9. **Applicable Federal, State or Local Requirements.** The operator must ensure that the stormwater controls implemented at the site are consistent with all applicable federal, state, or local requirements. Additionally, an operator who is operating under approved local erosion and sediment plans, grading plans, local stormwater permits, or stormwater management plans shall submit signed copies of the Notice of Intent to the local agency (or authority) upon the local agency's request.

### 10. **Allowable Non-Stormwater Discharges.**

- A. The following non-stormwater discharges that are combined with stormwater during construction may be authorized by this permit. Non-stormwater discharges must be addressed in the stormwater pollution prevention plan.
- 1) Fire fighting activities;
  - 2) Fire hydrant flushings;
  - 3) Water used to wash vehicles (where detergents or other chemicals are not used) or control dust in accordance with Part II.A.4.I.2;
  - 4) Potable water sources including uncontaminated waterline flushings;
  - 5) Landscape Irrigation ;
  - 6) Routine external building wash down which does not use detergents or other chemicals;
  - 7) Pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled materials have been removed) and where detergents or other chemicals are not used;
  - 8) Uncontaminated air conditioning, compressor condensate (See Part I.B.12 of this permit);,
  - 9) Uncontaminated springs, excavation dewatering and groundwater (See Part I.B.12 of this permit);
  - 10) Foundation or footing drains where flows are not contaminated with process materials such as solvents (See Part I.B.12 of this permit);

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**11. Limitations on Coverage (Exclusions).** The following stormwater discharges associated with construction activity are not covered by this permit:

- A. **Post Construction Discharge.** Stormwater discharges associated with construction activities that originate from the site after construction activities have been completed, the site has undergone final stabilization, and the permit has been terminated.
- B. **Discharges Mixed with Non-Stormwater.** Stormwater discharges that are mixed with sources of non-stormwater other than those identified in Part I.B.10.
- C. **Discharges Covered by another Permit.** Stormwater discharges associated with construction activity that are covered under an individual or an alternative general permit may be authorized by this permit after an existing permit expires provided the expired permit did not establish numeric effluent limitations for such discharges.
- D. **Discharges into Receiving Waters with an Approved TMDL.** Discharges from a site into receiving waters for which there is an established total maximum daily load (TMDL) allocation ([www.adec.state.ar.us/water/branch\\_planning/default.htm](http://www.adec.state.ar.us/water/branch_planning/default.htm)) for Turbidity, Oil & Grease, and/or other pollutants at the discretion of the Director are not eligible for coverage under this permit unless the permittee develops and certifies a stormwater pollution prevention plan (SWPPP) that is consistent with the assumptions and requirements in the approved TMDL. To be eligible for coverage under this general permit, operators must incorporate into their SWPPP any conditions applicable to their discharges necessary for consistency with the assumptions and requirements of the TMDL within any timeframes established in the TMDL. If a specific numeric wasteload allocation has been established that would apply to the project's discharges, the operator must incorporate that allocation into its SWPPP and implement necessary steps to meet that allocation. Please note that the Department will be reviewing this information. If it is determined that the project will discharge to a TMDL, then the Department may require additional BMPs.
- E. **Discharges into Impaired Receiving Waters (303(d) List).** Discharges from a site into a receiving waters listed as impaired under Section 303(d) of the Clean Water Act ([www.adec.state.ar.us/water/branch\\_planning/default.htm](http://www.adec.state.ar.us/water/branch_planning/default.htm)) for Turbidity, Oil & Grease and/or other pollutants at the discretion of the Director, should incorporate into the SWPPP any additional BMPs needed to sufficiently protect water quality. The SWPPP should include a proposal for monitoring to determine if the BMPs and controls are effective. Please note that the Department will be reviewing this information. If it is determined that the project will discharge to an impaired water body, then the Department may require additional BMPs.
- F. **Endangered and Threatened Species and Critical Habitat Protection.** Stormwater discharges from construction sites that are likely to adversely affect a listed endangered or threatened species or its critical habitat must contact the U.S. Fish and Wildlife Service (USFWS) at (501) 513-4470 or [www.fws.gov/arkansas-es](http://www.fws.gov/arkansas-es). Discharges which are not in compliance with the Endangered Species Act (ESA) can not be covered under this permit.

In order to obtain coverage, the applicant must follow the process required by the USFWS in order to determine the project's compliance with the ESA. This automatic process can be found on the USFWS website at the following address: [www.fws.gov/arkansas-es](http://www.fws.gov/arkansas-es). The certification provided by the process must be included in the project's Stormwater Pollution Prevention Plan. If at some point during the process, the submittal of information to the USFWS is required, then the incomplete checklist should be submitted to the Department along with the letter of correspondence that was submitted to the USFWS.

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**12. Trench and Ground Water Control.** There shall be no turbid discharges to surface waters of the state resulting from dewatering activities. If trench or ground waters contain sediment, it must pass through a sediment settling pond or other equally effective sediment control device, prior to being discharged from the construction site. Alternatively, sediment may be removed by settling in place or by dewatering into a sump pit, filter bag, or comparable practice. Ground water dewatering which does not contain sediment or other pollutants is not required to be treated prior to discharge. However, care must be taken when discharging ground water to ensure that it does not become pollutant-laden by traversing over disturbed soils or other pollutant sources.

**13. Buffer Zones.**

An undisturbed buffer zone as stated below shall be maintained at all times. Exceptions from this requirement for areas, such as water crossings, limited water access, and restoration of the buffer are allowed if the permittee fully documents in the SWPPP the circumstances and reasons for the buffer zone encroachment. Additionally, this requirement is not intended to interfere with any other ordinance, rule or regulation, statute or other provision of law.

- A. For construction projects where clearing and grading activities will occur, the SWPPP must provide at least twenty-five (25) feet of buffer zone, as measured horizontally from the top of the bank to the disturbed area, from any named or unnamed streams, creeks, rivers, lakes or other water bodies.
- B. The Department may also require up to fifty (50) feet of buffer zone, as measured from the top of the bank to the disturbed area, from established TMDL water bodies, streams listed on the 303 (d)-list, an Extraordinary Resource Water (ERW), Ecologically Sensitive Waterbody (ESW), Natural and Scenic Waterway (NSW), and/or any other uses at the discretion of the Director.
- C. Linear projects will be evaluated individually by the Department to determine buffer zone setbacks.

**14. Waivers from Permit Coverage.** The Director may waive the otherwise applicable requirements of this general permit for stormwater discharges from construction activities under the terms and conditions described in this section.

- A. Waiver Applicability and Coverage. Based upon 40 CFR Part 122.26.b.15.i.A, operators of small construction activities may apply for and receive a waiver from the requirements to obtain this permit.
- B. No Stormwater Leaving the Site. If all of the stormwater from the construction activity is captured on-site under any size storm event and allowed to evaporate, soak into the ground on-site, or is used for irrigation, a permit is not needed.
- C. TMDL Waivers. This waiver is available for sites with automatic coverage if the ADEQ has established or approved a TMDL that addresses the pollutant(s) of concern and has determined that controls on stormwater discharges from small construction activity are not needed to protect water quality. The pollutant(s) of concern include sediment (such as total suspended solids, turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the construction activity. Information on TMDLs that have been established or approved by ADEQ is available from ADEQ online at [www.adeq.state.ar.us/water/branch\\_planning/default.htm](http://www.adeq.state.ar.us/water/branch_planning/default.htm).
- D. Discharges into Impaired Receiving Waters (303(d) List). This waiver is available for sites with automatic coverage if the ADEQ has listed the waters in 303(d) list that addresses the pollutant(s) of concern and has determined that controls on stormwater discharges from small construction activity are not needed to protect water quality. The pollutant(s) of concern include sediment (such as total suspended solids, turbidity or siltation) and any other pollutant

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that has been identified as a cause of impairment of any water body that will receive a discharge from the construction activity. Information on 303(d) that have been established by ADEQ is available from ADEQ online at [www.adeg.state.ar.us/water/branch\\_planning/default.htm](http://www.adeg.state.ar.us/water/branch_planning/default.htm)

- E. Sites part of the Larger Common Plan. Any single lot less than 5 acres that is part of larger common plan may be considered as a small construction site. As long as the operator has complied with all conditions of this permit without submitting an NOI in accordance with 40 CFR 122.28(b)(2)(v). This waiver is applicable if the operator has only one lot in the larger common plan or multiple lots in which construction will not begin within 24 months of the prior construction.

**15. Continuation of the Expired General Permit.** If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with the Administrative Procedure Act and remain in force and effect. If you were granted permit coverage prior to the expiration date, you will automatically remain covered by the continued permit until the earliest of:

- Reissuance or replacement of this permit, at which time the operator must comply with the conditions of the new permit to maintain authorization to discharge and, the operator is required to notify the Department of his/her intent to be covered under this permit within 60 days after the effective date of the renewal permit ; or
- Submittal of a Notice of Termination; or
- Issuance of an individual permit for the project's discharges; or
- A formal permit decision by ADEQ to not reissue this general permit, at which time you must seek coverage under an alternative general permit or an individual permit

Small site Operators are responsible for ensuring that the site is in compliance with any changes or updates of this general permit, by reviewing the ADEQ website at:

[http://www.adeg.state.ar.us/water/branch\\_npdes/stormwater/construction/construction.htm](http://www.adeg.state.ar.us/water/branch_npdes/stormwater/construction/construction.htm) .

**16. Notice of Termination (NOT).** All construction activities that disturbed soil are complete, the site has reached final effective stabilization (100% stabilization with 80% density), all stormwater discharges from construction activities authorized by this permit are eliminated and all temporary sediment controls are removed and properly disposed, the operator of the facility may submit a complete Notice of Termination (NOT) to the Director. Along with the NOT, pictures that represent the entire site should be submitted for review. Final stabilization is not required if the land is returned to its pre-construction agriculture use. Operators of small construction sites are not required to submit NOTs for their construction sites. However, final stabilization is required on all sites. If a Notice of Termination is not submitted when the project is completed, the operator will be responsible for annual fees.

**17. Responsibilities of the Operator of a Larger Common Plan of Development for a Subdivision.**

- A. The operator is ultimately responsible for the runoff from the perimeter of the entire development. Regardless for the reason of the runoff, the operator is responsible for ensuring sufficient overall controls of the development.
- B. The operator shall not terminate the permit coverage until the following conditions have been met:
- 1) After all construction including landscaping and lot development has been completed; and
  - 2) All lots are sold and developed.

The following exceptions to this requirement can apply:

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- a. less than 100% sold and developed at the discretion of the Director, or
  - b. Separation of the larger common plan if twenty-four (24) months have passed with no construction activity.
  - c. All lots are developed and there are no temporary common controls for subdivision outfalls, i.e. sediment basins, large sediment traps, check dams, etc.
- 3) If lots are sold then re-sold to a third party then permit coverage needs to be obtained by each of the operators while they have ownership of the lots. The second owner is responsible to obtain the same certification from the third owner, i.e. the certification must pass from owner to owner.
- C. The operator shall not terminate permit coverage until the operators of all the individual lots within the larger common plan are notified of their permitting requirements under this general permit. In this case, the signed certification statements from each operator of individual lots must be maintained in the stormwater pollution prevention plan for the large common plan. A copy of the signed certifications must be submitted to ADEQ with the NOT. The certification shall be as follows:

"I, \_\_\_\_\_, operator of an individual lot # \_\_\_\_\_, block # \_\_\_\_\_ of \_\_\_\_\_ subdivision, certify under penalty of law that I was notified by the operator of the larger common plan of the stormwater permitting requirements for my construction site(s). I understand prior to commencement of any construction activity I have to prepare and comply with a SWPPP and post the Construction Site Notice. I understand that prior to the sale of this lot to another party, I must notify the new owner of ADEQ requirements and obtain this certification from the new owner."

Signature \_\_\_\_\_

- D. The following examples are provided as clarification:
- 1) If a small portion of the original common plan of development remains undeveloped and there has been a period of time (i.e., more than 24 months) where there are no ongoing construction activities (i.e., all areas are either undisturbed or have been finally stabilized), you may re-evaluate the original project based on the acreage remaining from the original "common plan." If less than five but more than one acre remains to build out the original "common plan", coverage under the large permit may not be required. However, you will need to comply with the terms and conditions for Small Construction Sites in the Construction General Permit. If less than one acre remains of the original common plan, your individual project may be treated as a part of a less than one acre development and no permit would be required.
  - 2) If you have a long-range master plan of development where some portions of the master plan are conceptual rather than a specific plan of future development and the future construction activities would, if they occur at all, happen over an extended period of time (i.e., more than 24 months), you may consider the "conceptual" phases of development to be separate "common plans" provided the periods of construction for the physically interconnected phases will not overlap.
  - 3) Where discrete construction projects within a larger common plan of development or sale are located  $\frac{1}{4}$  mile or more apart and the area between the projects is not being disturbed, each individual project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same "common plan" is not concurrently being disturbed. For example, an interconnecting access road or pipeline were under construction at the same time, they would generally be considered as a part of a single "common plan" for permitting purposes.
  - 4) If the operator sells all the lots in the subdivision to one or more multi-lot homebuilder(s), provisions must be made to obtain stormwater permit coverage by one of the following options:
    - a. The permit may be transferred from the first "operator" to the new/second "operator".

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- b. A new, separate permit may be obtained by the second "operator".  
NOTE: If a new permit is to be obtained, then it must be obtained before the first/original permit is terminated.

- 5) If the operator retains ownership of any lots in the subdivision, the operator shall maintain permit coverage for those lots under the original permit. The operator shall modify the Stormwater Pollution Prevention Plan (SWPPP) by stating which lots are owned and marking the lots on the site map. If there are one (1) or two (2) lots remaining and the total acreage is less than five (5) acres, the original permit could be terminated and those lots could be covered as a small site.

**18. Change in Operator.** For stormwater discharges from large construction sites where the operator changes, including instances where an operator is added after the initial NOI has been submitted, the new operator must ensure that a permit transfer form is received by the Department at least two (2) weeks prior to the operator beginning work at the site.

**19. Late Notifications.** A discharger is not precluded from submitting an NOI in accordance with the requirements of this part after the dates provided in Part I.B.6 of this permit. In such instances, the Director may bring an enforcement action for failure to submit an NOI in a timely manner or for any unauthorized discharges of stormwater associated with construction activity that have occurred on or after the dates specified in this permit.

**20. Failure to Notify.** The operator of a construction site who fails to notify the Director of their intent to be covered under this permit, and who potentially discharges pollutants (sediment, debris, etc.) to waters of the State without an NPDES permit, is in violation of the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended).

**21. Maintenance.** Determination of the acreage of disturbance does not typically include disturbance for routine maintenance activities on existing roads where the line and grade of the road is not being altered, nor does it include the paving of existing roads. Maintenance activities (returning to original conditions) are not regulated under this permit unless one or more acres of underlying and/or surrounding soil are cleared, graded, or excavated as part of the operation.

**22. Releases in Excess of Reportable Quantities.**

A. The discharge of hazardous substances or oil in the stormwater discharge(s) from a facility shall be prevented or minimized in accordance with the applicable stormwater pollution prevention plan for the facility. This permit does not relieve the operator of the reporting requirements of 40 CFR Parts 110, 117 and 302. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reporting quantity established under either 40 CFR 110, 40 CFR 117, or 40 CFR 302, occurs during a 24-hour period, the following action shall be taken:

- 1) Any person in charge of the facility is required to notify the National Response Center (NRC) (800-424-8802) in accordance with the requirements of 40 CFR 110, 40 CFR 117, or 40 CFR 302 as soon as he/she has knowledge of the discharge;
- 2) The operator shall submit within five (5) calendar days of knowledge of the release a written description of the release (including the type and estimate of the amount of material released), the date that such release occurred, and the circumstances leading to the release, and steps to be taken in accordance with Part II.B.13 of this permit to the ADEQ.
- 3) The stormwater pollution prevention plan described in Part II.A of this permit must be modified within fourteen (14) calendar days of knowledge of the release to:
  - a. Provide a description of the release and the circumstances leading to the release; and

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- b. The date of the release;
2. Additionally, the plan must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

B. Spills. This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill.

### **23. Attainment of Water Quality Standards**

The operator must select, install, implement and maintain control measures at the construction site that minimize the discharge of turbidity and/or oil and grease and/or other pollutants at the discretion of the Director as necessary to protect water quality. In general, except in situations explained in below, the stormwater controls developed, implemented, and updated to be considered stringent enough to ensure that your discharges do not cause or contribute to an excursion above any applicable water quality standard.

At any time after authorization, the ADEQ may determine that the stormwater discharges may cause, have reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. If such a determination is made, ADEQ will require the permittee to:

- A. Develop a supplemental BMP action plan describing SWPPP modifications to address adequately the identified water quality concerns and submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining water quality standards; or
- B. Cease discharges of pollutants from construction activity and submit an individual permit application.

All written responses required under this part must include a signed certification consistent with Part II.B.9.

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## PART II STANDARD CONDITIONS

Information in **Part II** is organized as follows:

**Section A:** Stormwater Pollution Prevention Plans:

1. Deadlines for Plan Preparation and Compliance
2. Signature, Plan Review, Plan Availability, and NOC
3. Keeping Plans Current
4. Contents of Stormwater Pollution Prevention Plan
5. Contractors
6. Inspectors
7. Plan Certification

**Section B:** Standard Permit Conditions:

1. Retention of Records
2. Duty to Comply
3. Penalties for Violations of Permit Conditions
4. Continuance of Expired General Permit
5. Need to Halt or Reduce Activity Not a Defense
6. Duty to Mitigate
7. Duty to Provide Information
8. Other Information
9. Signatory Requirements
10. Certification
11. Penalties for Falsification of Reports
12. Penalties for Tampering
13. Oil and Hazardous Substance Liability
14. Property Rights
15. Severability
16. Transfers
17. Proper Operation and Maintenance
18. Inspection and Entry
19. Permit Actions
20. Re-Opener Clause
21. Local Requirements

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## SECTION A: STORMWATER POLLUTION PREVENTION PLANS (SWPPP).

The operator must prepare a stormwater pollution prevention plan (the plan/SWPPP) before permit coverage. At least one SWPPP must be developed for each construction project or site covered by this permit. The SWPPP must follow the order outlined in Part II.A.4-7 below. This basic ADEQ format is available through the Department's website [http://www.adeg.state.ar.us/water/branch\\_npdes/stormwater/construction/construction.htm](http://www.adeg.state.ar.us/water/branch_npdes/stormwater/construction/construction.htm). Other formats may be used at the discretion of the Director if the format has been approved by the Department prior to use. The operator must implement the SWPPP as written from initial commencement of construction activity until final stabilization is complete, with changes being made as deemed necessary by the permittee, local, state or federal officials. The plan shall be prepared in accordance with good engineering practices, by qualified personnel and must:

- Identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges from the construction;
- Identify, describe and ensure the implementation of Best Management Practices (BMPs), with emphasis on initial site stabilization, which are to be used to reduce pollutants in stormwater discharges from the construction site;
- Be site specific to what is taking place on a particular construction site;
- Ensure compliance with the terms and conditions of this permit; and
- Identify the responsible party for on-site SWPPP implementation.

### 1. Deadlines for Plan Preparation and Compliance.

#### A. Large Construction Sites

The plan shall be completed and submitted for review, along with a NOI and initial permit fee 2 weeks prior to commencement of construction activities. Submittals of updates to the plan during the construction process are required only if requested by the Director.

#### B. Automatic Coverage Sites

The plan shall be completed prior to the commencement of construction activities and updated as appropriate. Submittal of NOI, permit fee and SWPPP is not required.

#### C. Existing Permittees

Existing permittees, that were permitted prior to the issuance of this renewal permit, are required to update their plan as appropriate to come into compliance with the requirements contained in Part II.A.4 within sixty (60) days from the effective date of this permit.

### 2. Signature, Plan Review, Plan Availability and NOC.

- A. The plan shall be signed by the operator in accordance with Part II.B.9 and be retained on-site at the construction site during normal business hours (8:00 A.M. – 5:00 P.M.). The operator shall keep the complete updated SWPPP on-site.
- B. The operator shall make plans available, upon request, to the Director, the EPA, or a State or local agency reviewing sediment and erosion plans, grading plans, or stormwater management plans, or, in the case of a stormwater discharge associated with construction activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system.

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- C. The Director, or authorized representative, may notify the operator at any time that the plan does not meet one or more of the minimum requirements of this Part. Within seven (7) business days of such notification from the Director, (or as otherwise provided by the Director), or authorized representative, the operator shall make the required changes to the plan and submit to the Director a written certification that the requested changes have been made. The Department may request re-submittal of the SWPPP to confirm that all deficiencies have been adequately addressed. The Department may also take appropriate enforcement action for the period of time the operator was operating under a plan that did not meet the minimum requirements of this permit.
- D. The operator must post the NOC near the main entrance of the construction site and visible to the public. The NOC will indicate the location of the SWPPP.
3. **Keeping Plans Current.** The operator shall amend the plan within seven (7) business days or whenever there is a change in design, construction, operation, or maintenance at the construction site which has a significant effect on the potential for the discharge of pollutants to the Waters of the State that has not been previously addressed in the SWPPP. The plan should also be modified if a determination has been made through inspections, monitoring (if required), *or* investigation by the operator, local, state, or federal officials that the discharges are causing or contributing to water quality violation or the plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified in stormwater discharges from the construction site.
4. **Contents of the Stormwater Pollution Prevention Plan.** The stormwater pollution prevention plan shall include the following items:
- A. **Site Description.** Each plan shall provide a description of the following:
- 1) Pre-construction topographic view;
  - 2) A description of the nature of the construction activity and its intended use after the NOT is filed (i.e., residential subdivision, shopping mall, etc.);
  - 3) A description of the intended sequence of major activities which disturb soils for major portions of the site (e.g. grubbing, excavation, grading, infrastructure installation, etc.);
  - 4) Estimates of the total area of the site (including off-site borrow and fill areas) and the total area of the site that is expected to be disturbed by excavation, grading or other activities; and
  - 5) An estimate of the runoff coefficient of the site for pre- and post-construction activities and existing data describing the soil or the quality of any discharge from the site.
- B. **Responsible Parties.** The SWPPP must identify (as soon as this information is known) all parties (i.e., General Contractors, Landscapers, Project Designers, and Inspectors) responsible for particular services they provide to the operator to comply with the requirements of the SWPPP for the project site, and areas over which each party has control. If these parties change over the life of the permit, or new parties are added, then the SWPPP should be updated to reflect these changes.
- C. **Receiving Waters.** The SWPPP must identify the nearest receiving water(s), or if the discharge is to a municipal separate storm sewer, the name of the operator of the municipal system, the ultimate receiving water(s)
- D. **Documentation of Permit Eligibility Related to the 303 (d) list and Total Maximum Daily Loads (TMDL).** The SWPPP should include information on whether or not the stormwater discharges from the site enter a water body that is on the most recent 303 (d) list or with an approved TMDL. If the stormwater discharge does enter a water body that is on the most recent 303(d) list or with an approved TMDL, then the SWPPP should address the following items:
- 1) Identification of the pollutants that the 303 (d) list or TMDL addresses, specifically whether the 303 (d) list or

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- 9) Locations where stormwater is discharged to a surface water and/or municipal separate storm sewer system if applicable,
  - 10) Locations where stormwater is discharged off-site (should be continuously updated);
  - 11) Areas where final stabilization has been accomplished and no further construction phase permit requirements apply.
- H. Stormwater Controls. Each plan shall include a description of appropriate controls and measures that will be implemented at the construction site. The plan will clearly describe for each major activity identified in the project description control measures associated with the activity and the schedule during the construction process that the measures will be implemented. Perimeter controls for the site must be installed after the clearing and grubbing necessary for installation of the measure, but before the clearing and grubbing for the remaining portions of the site. Perimeter controls must be actively maintained until final stabilization of those portions of the site upward of the perimeter control. Temporary perimeter controls must be removed after final stabilization and properly disposed. The description and implementation of controls shall address the following minimum components:
- 1) Initial Site Stabilization, Erosion, and Sediment Controls. The SWPPP must address, at a minimum, the following:
    - a. For larger common plans, only streets, drainage, utility areas, areas needed for initial construction of streets (e.g., borrow pits, parking areas, etc.) and areas needed for stormwater structures may be disturbed initially. Upon stabilization of the initial areas, additional areas may be disturbed.
    - b. The construction-phase erosion (such as site stabilization) and sediment controls (such as check dams) should be designed to retain sediment on-site to the extent practicable.
    - c. All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications, good engineering, and construction practices. If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the permittee must replace or modify the control for site situations.
    - d. If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts (e.g., fugitive sediment in street could be washed into storm sewers by the next rain and/or pose a safety hazard to users of public streets). This permit does not give the authority to trespass onto other property; therefore this condition should be carried out along with the permission of neighboring land owners to remove sediment.
    - e. Sediment must be removed from sediment traps (if used please specify what type) or sedimentation ponds when design capacity has been reduced by 50%.
    - f. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls picked up daily).
    - g. Off-site material storage areas (also including overburden and stockpiles of dirt, borrow areas, etc.) used solely by the permitted project are considered a part of the project and shall be addressed in the SWPPP.
  - 2) Stabilization practices. The SWPPP must include, at a minimum, the following information:
    - a. Description and Schedule: A description of initial, interim, and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans should ensure that existing vegetation is preserved where attainable and that disturbed areas are stabilized. Stabilization practices may include: mulching, temporary seeding, permanent seeding, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, and preservation of mature vegetation and other appropriate measures.
    - b. Description of buffer areas: The Department requires that a buffer zone be established between the top of stream bank and the disturbed area. The SWPPP must contain a description of how the site will maintain

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buffer zones. For construction projects where clearing and grading activities will occur, SWPPP must provide at least twenty-five (25) feet of buffer zone from any named or unnamed streams, creeks, rivers, lakes or other water bodies. The plan must also provide at least fifty (50) feet of buffer zone from established TMDL water bodies, streams listed on the 303 (d)-list, an Extraordinary Resource Water (ERW), Ecologically Sensitive Waterbody (ESW), Natural and Scenic Waterway (NSW), and/or other uses at the discretion of the Director. If the site will be disturbed within the recommended buffer zone, then the buffer zone area must be stabilized as soon as possible. Exceptions from this requirement for areas, such as water crossings, limited water access, and restoration of the buffer are allowed if the permittee fully documents in the SWPPP the circumstances and reasons for the buffer zone encroachment. Additionally, this requirement is not intended to interfere with any other ordinance, rule or regulation, statute or other provision of law. Please note that above-grade clearing that does not disturb the soil in the buffer zone area does not have to comply with buffer zone requirements.

- c. **Records of Stabilization:** A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be included in the plan.
  - d. **Deadlines for Stabilization:** Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than fourteen (14) days after the construction activity in that portion of the site has temporarily or permanently ceased, except:
    - (1) Where the initiation of stabilization measures by the fourteenth (14<sup>th</sup>) day after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
    - (2) Where construction activity will resume on a portion of the site within twenty-one (21) days from when activities ceased (e.g. the total time period that construction activity is temporarily ceased is less than twenty-one (21) days), then stabilization measures do not have to be initiated on that portion of the site by the fourteenth (14<sup>th</sup>) day after construction activity temporarily ceased.
- 3) **Structural Practices.** A description of structural practices to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. Structural practices should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the Clean Water Act. Such practices may include but are not limited to:
- silt fences (installed and maintained)
  - earthen dikes to prevent run-on
  - drainage swales to prevent run-on
  - check dams
  - subsurface drains
  - pipe slope drains
  - storm drain inlet protection
  - rock outlet protection
  - sediment traps
  - reinforced soil retaining systems
  - gabions
  - temporary or permanent sediment basins.

A combination of erosion and sediment control measures is encouraged to achieve maximum pollutant removal. Adequate spillway cross-sectional area and re-enforcement must be provided for check dams, sediment traps, and sediment basins.

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## a. Sediment Basins.

- (1) For common drainage locations that serve an area with ten (10) or more acres (including run-on from other areas) draining to a common point, a temporary or permanent sediment basin that provides storage based on either the smaller of 3600 cubic feet per acre, or a size based on the runoff volume of a 10 year, 24 hour storm, shall be provided where attainable (so as not to adversely impact water quality) until final stabilization of the site. In determining whether installing a sediment basin is attainable, the operator may consider factors such as site soils, slope, available area on site, etc. Proper hydraulic design of the outlet is critical to achieving the desired performance of the basin. The outlet should be designed to drain the basin within twenty-four (24) to seventy-two (72) hours. (A rule of thumb is one square foot per acre for a spillway design.) The 24-hour limit is specified to provide adequate settling time; the seventy-two (72)-hour limit is specified to mitigate vector control concerns. If a pipe outlet design is chosen for the outfall, then an emergency spillway is required. If "non-attainability" is claimed, then an explanation of non-attainability shall be included in the SWPPP. Where a sediment basin is not attainable, smaller sediment basins and/or sediment traps shall be used. Where a sediment basin is un-attainable, vegetative buffer strips or other suitable controls which are effective are required for all side slopes and down slope boundaries of the construction area. The plans for removal of the sediment basin should also be included with the description of the basin in the SWPPP.
- (2) For drainage locations serving an area less than ten (10) acres, sediment traps, silt fences, or equivalent sediment controls are required for all side slope and down slope boundaries of the construction area unless a sediment basin providing storage based on either the smaller of 3600 cubic feet per acre, or a size based on the run off volume of a 10 year, 24 hour storm is provided. (A rule of thumb is one square foot per acre for a spillway.) However, in order to protect the waters of the state, the Director, at their discretion, may require a sediment basin for any drainage areas draining to a common point.

## b. Velocity Dissipation Devices.

Velocity dissipation devices must be placed at discharge locations, within concentrated flow areas serving two or more acres, and along the length of any outfall channel to provide a non-erosive flow velocity from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (i.e., no significant changes in the hydrological regime of the receiving water). Please note that the use of hay-bales is not recommended in areas of concentrated flow.

## I. Other Controls.

- 1) No solid materials, including building materials, shall be discharged to waters of the State.
- 2) Off-site vehicle tracking of sediments and the generation of dust shall be minimized through the use of a stabilized construction entrance and exit and/or vehicle tire washing.
- 3) For lots that are less than one (1) acre in size an alternative method may be used in addition to a stabilized construction entrance. An example of an alternative method could be daily street sweeping. This could allow for the shortening of the construction entrance.
- 4) The plan shall ensure and demonstrate compliance with applicable State or local waste disposal, temporary and permanent sanitary sewer or septic system regulations.
- 5) No liquid concrete waste shall be discharged to waters of the State. Appropriate controls to prevent the discharge of concrete washout waters must be implemented if concrete washout will occur on-site.
- 6) No contaminants from fuel storage areas, hazardous waste storage and truck wash areas shall be discharged to

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waters of the State. Methods for protecting these areas shall be identified and implemented. These areas should not be located near a water body, if there is a water body on or near the project.

- J. Non-stormwater discharges. Sources of non-stormwater listed in Part I.B.10 of this permit that are combined with stormwater discharges associated with construction activity must be identified in the plan. This list should be site specific non-stormwater discharges.
- K. Post-Construction Stormwater Management. The operator is required to provide a description of measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur after construction operations have been completed. Structural measures should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 (Corps of Engineers) of the Clean Water Act. This permit only addresses the installation of stormwater management measures, and not the ultimate operation and maintenance of such structures after the construction activities have been completed and the site has undergone final stabilization. However, post-construction stormwater BMPs that discharge pollutants from a point source once construction is completed may need authorization under a separate ADEQ NPDES permit. Such practices may include but are not limited to:
- infiltration of runoff onsite
  - flow attenuation by use of open vegetated swales and natural depressions
  - stormwater retention structures
  - stormwater detention structures (including wet ponds)
  - sequential systems, which combine several practices

A goal of at least 80 % removal of total suspended solids from these flows which exceed predevelopment levels should be used in designing and installing stormwater management controls (where practicable). Where this goal is not met, the operator shall provide justification for rejecting each practice listed above based on site conditions.

- L. Applicable State or Local Programs. The SWPPP must be updated as necessary to reflect any revisions to applicable federal, state, or local requirements that affect the stormwater controls you implement at your site.
- M. Inspections.

Inspections should be conducted by qualified personnel (provided by the operator). Inspections must include all areas of the site disturbed by construction activity and areas used for storage of materials that are exposed to precipitation. Inspectors must look for evidence of, or the potential for, pollutants entering the stormwater conveyance system. Erosion and sedimentation control measures must be observed to ensure proper operation. Discharge locations must be inspected to determine whether erosion control measures are effective in preventing significant impacts to waters of the State, where accessible. Where discharge locations are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site must be inspected for evidence of off-site sediment tracking. Inspections may not be required if the lot(s) within a larger common plan is/are sufficiently stabilized. The operator must ensure that no sediment will leave the lot(s) that are stabilized. These lots must be identified within the SWPPP and show what date they were stabilized. If the operator is unable to ensure this, then inspections must continue.

- 1) **Inspection Frequency.** Inspections must be conducted in accordance with one of the following schedules listed below. The schedule **must be specified** in the Stormwater Pollution Prevention Plan (SWPPP).
- a. At least once every 7 calendar days, or
  - b. At least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater (a

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  - sequential systems, which combine several practices

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rain gauge must be maintained on-site).

- 2) **Inspection Form.** The ADEQ inspection form should be used for all inspections. The inspection form should include any erosion/sediment controls that are being used on the site. The form is available on the Departments website [www.adeq.state.ar.us](http://www.adeq.state.ar.us). If a different form is used it must at a minimum contain the following information:
  - a. Inspector Name and Title
  - b. Date of Inspection
  - c. Amount of Rainfall and Days Since Last Rain Event (only applicable to Part II.A.4.M.1.b)
  - d. BMPs used on-site
  - e. If the BMPs are in working order and if Maintenance is required (when scheduled and completed)
  - f. Location and Dates When Major Construction Activities Begin, Occur or Cease
  - g. Report Signature of Inspector

Additional information may be added to the inspection report at the permittees discretion.

- 3) **Inspection Records.** The report shall be retained as part of the stormwater pollution prevention plan for at least three (3) years from the date the site is finally stabilized. The report shall be signed and have a certification statement in accordance with the requirements of this permit.
  - 4) **Winter Conditions.** Inspections will not be required at construction sites where snow cover exists over the entire site for an extended period, and melting conditions do not exist. Regular inspections, as required by this permit, are required at all other times as specified in this permit.
- N. **Maintenance.** A description of procedures to maintain vegetation, erosion and sediment control measures and other protective measures in good, effective operating condition shall be outlined in the plan. Any repairs that are needed based on an inspection shall be completed within three (3) business days of discovery or as otherwise directed by state or local officials. However, if conditions do not permit large equipment to be used, a longer time frame is allowed if the condition is thoroughly documented on the inspection form. Maintenance for manufactured controls must be done at a minimum of the manufacture's specifications. Maintenance for non-manufactured controls, i.e. check dams, sediment traps, must be done upon 50% capacity.

## 5. **Contractors.**

For each measure identified in the plan, the stormwater pollution prevention plan must clearly identify the contractor(s) that will implement the measure. If additional contractors are added to the project, then the list of contractors should be updated accordingly in the SWPPP.

## 6. **Inspectors.**

The stormwater pollution prevention plan must clearly identify the person or persons that will be conducting the inspections of all stormwater controls. If additional inspectors are added to the project, then the list of inspectors should be updated accordingly in the SWPPP.

## 7. **Plan Certification.**

The Stormwater Pollution Prevention Plan (SWPPP) Certification must be signed by either the operator or the cognizant official identified on the Notice of Intent. All documents required by the permit and other information requested by the Director shall be signed by operator or by a duly authorized representative of the operator (Please see Part II.B.10 below

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for certification).

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## SECTION B: STANDARD PERMIT CONDITIONS

1. **Retention of Records.**
  - A. The operator shall retain records of all stormwater pollution prevention plans, all inspection reports required by this permit, and records of all data used to complete the Notice of Intent to be covered by this permit for a period of at least three years from the date the Notice of Termination letter is signed by the Department. This period may be extended by request of the Director at any time.
  - B. The operator shall retain a signed copy of the stormwater pollution prevention plan required by this permit at the construction site from the date of project initiation to the date of final stabilization.
2. **Duty to Comply.** The operator must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Water Act and the Arkansas Water and Air Pollution Control Act and is grounds for: enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application.
3. **Penalties for Violations of Permit Conditions.** The Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended) provides that any person who violates any provisions of a permit issued under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year, or a criminal penalty of not more than twenty five thousand dollars (\$25,000) or by both such fine and imprisonment for each day of such violation. Any person who violates any provision of a permit issued under the Act may also be subject to civil penalty in such amount as the court shall find appropriate, not to exceed ten thousand dollars (\$10,000) for each day of such violation. The fact that any such violation may constitute a misdemeanor shall not be a bar to the maintenance of such civil action.
4. **Continuance of the Expired General Permit.** An expired general permit continues in force and effect until a new general permit is issued. If this permit is not re-issued or replaced prior to the expiration date, it will be administratively continued in accordance with the Administrative Procedure Act and remain in force and effect. If you were granted permit coverage prior to the expiration date, you will automatically remain covered by the continued permit until the earliest of:
  - A. Re-issuance or replacement of this permit, at which time you must comply with the conditions of the new permit, within 60 days after issuance, to maintain authorization to discharge; or
  - B. Your submittal of a Notice of Termination; or
  - C. Issuance of an individual permit for the project's discharges; or
  - D. A formal permit decision by the ADEQ to not re-issue this general permit, at which time you must seek coverage under an individual permit.
5. **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for an operator 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.
6. **Duty to Mitigate.** The operator shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has reasonable likelihood of adversely affecting human health or the environment.
7. **Duty to Provide Information.** The operator shall furnish to the Director, an authorized representative of the Director, the

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EPA, a State or local agency reviewing sediment and erosion plans, grading plans, or stormwater management plans, or in the case of a stormwater discharge associated with industrial activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system, within a reasonable time, any information which is requested to determine compliance with this permit.

8. **Other Information.** When the operator becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report to the Director, he or she shall promptly submit such facts or information.
9. **Signatory Requirements.** All Notices of Intent, reports, or information submitted to the Director or the operator of a regulated small, medium, or large municipal separate storm sewer system shall be signed and certified.
  - A. All Notices of Intent shall be signed as follows:
    - 1) For a corporation: by a responsible corporate officer. For purposes of this section, a responsible corporate officer means:
      - a. A president, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
      - b. The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
    - 2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively;
    - 3) For a municipality, State, Federal or other public agency: By either a principal executive or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
      - a. The chief executive officer of the agency; or
      - b. A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
  - B. All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
    - 1) The authorization is made in writing by a person described above and submitted to the Director;
    - 2) The authorization specifies either an individual or a person having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility, or position of equivalent responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and

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- 3) **Changes to authorization.** If an authorization under this Part is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the above requirements must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

**10. Certification.** Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments such as Inspection Form were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Note: For this permit only, "this document" refers to the Stormwater Pollution Prevention Plan, "attachments" refers to the site map and inspection forms, and "system" is referencing the project site.

11. **Penalties for Falsification of Reports.** The Arkansas Water and Air Pollution Control Act provides that any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained under this permit shall be subject to civil penalties specified in Part II.B.3 of this permit and/or criminal penalties under the authority of the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended).
12. **Penalties for Tampering.** The Arkansas Water and Air Pollution Control act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year or a fine of not more than twenty five thousand dollars (\$25,000) or by both such fine and imprisonment.
13. **Oil and Hazardous Substance Liability.** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties to which the operator is or may be subject under Section 311 of the Clean Water Act or Section 106 of CERCLA.
14. **Property Rights.** The issuance of this permit does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property, any invasion of personal rights, or any infringement of Federal, State, or local laws or regulations.
15. **Severability.** The provisions of this permit are severable. If any provisions of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provisions to other circumstances and the remainder of this permit shall not be affected thereby.
16. **Transfers.** This permit is not transferable to any person except after notice to the Director. A transfer form must be submitted to the ADEQ as required by this permit.
17. **Proper Operation and Maintenance.** The operator shall at all times:
  - A. Properly operate and maintain all control (and related appurtenances) which are installed or used by the operator to achieve compliance with the conditions of this permit. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by an operator only when the operation is necessary to achieve compliance with the conditions of the permit.

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- B. Provide an adequate operating staff which is duly qualified to carry out operation, inspection, maintenance, and testing functions required to insure compliance with the conditions of this permit.
18. **Inspection and Entry.** The operator shall allow the Director, the EPA, or an authorized representative, or, in the case of a construction site which discharges to a municipal separate storm sewer, an authorized representative of the municipal operator of the separate sewer system receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:
- A. Enter upon the operator'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 or equipment (including monitoring and control equipment);
19. **Permit Actions.** This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:
- A. Violation of any terms or conditions of this permit;
  - B. Obtaining this permit by misrepresentation or failure to fully disclose all relevant facts;
  - C. A change in any conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge;
  - D. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or
  - E. Failure of the operator to comply with the provisions of ADEQ Regulation No. 9 (Fee Regulation). Failure to promptly remit all required fees shall be grounds for the Director to initiate action to terminate this permit under the provisions of 40 CFR 122.64 and 124.5(d), as adopted by reference in ADEQ Regulation No. 6, and the provisions of ADEQ Regulation No. 8.
20. **Re-Opener Clause.**
- A. If there is evidence indicating potential or realized impacts on water quality due to any stormwater discharge associated with industrial activity covered by this permit, the operator of such discharge may be required to obtain an individual permit or an alternative general permit in accordance with Part I.B.22 of this permit, or the permit may be modified to include different limitations and/or requirements.
  - B. Permit modification or revocation will be conducted in accordance with the provisions of 40 CFR 122.62, 122.63, 122.64 and 124.5, as adopted by reference in ADEQ Regulation No. 6.
21. **Local Requirements.** All dischargers must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding any discharges of stormwater to storm drain systems or other water sources under their jurisdiction, including applicable requirements in municipal stormwater management programs developed to comply with the ADEQ permits. Dischargers must comply with local stormwater management requirements, policies, or guidelines including erosion and sediment control.

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## FACT SHEET AND SUPPLEMENTARY INFORMATION FOR DRAFT GENERAL PERMIT ARR150000 STORMWATER RUNOFF ASSOCIATED WITH CONSTRUCTION SITES IN ARKANSAS

Information in this part is organized as follows:

1. Background
2. Regulatory Background
3. Permit Coverage
  - a. Notice of Intent to be covered
  - b. Individual Permits
4. Discharge Characterization
5. Technology Requirements
6. Water Quality Requirements
7. BMP Requirements and Basis
8. Inspections
9. Other Conditions
10. Sources
11. Reaffirmation of Permit Coverage

### 1. BACKGROUND

On November 1, 2003, General Stormwater Permit No. ARR150000 became effective with an expiration date of October 31, 2008. ADEQ recognizes that it should have a replacement permit in place at that time. ADEQ is proposing to issue a three-year permit. This will enable coordination with a national regulation the EPA is currently developing for the construction and development industry. This national regulation, called the Effluent Limitations Guideline for the Construction and Development Industry, is under development and will not be completed until after the current Construction Stormwater Permit expires. Once finalized, ADEQ will be required to incorporate the provisions of this Effluent Guideline in the Construction General Stormwater Permits.

This is a renewal of the General Construction Stormwater permit. Upon renewal, the Department decided to add additional permit requirements and clarify the overall permit. The proposed major changes are as follows:

- A. The phrase "Owners or Operators" has been removed and replaced with the phrase "Operator."
- B. The following phrase has been removed from the cover page "in accordance with monitoring requirements, and other conditions set forth in Parts I and II herein."
- C. Medium sites have been removed. There are now two sizes for construction sites: Small (1-5 Acres) and Large (5 or more Acres).
- D. The following definitions have been added: ADEQ, Agricultural stormwater runoff, Arkansas Pollution Control and Ecology Commission, Automatic Coverage, Construction Site, Contaminated, Detention Basin, Disturbs, Erosion, Infrastructure, Impaired Water, Landscaping, Larger Common Plan of Development, Qualified Local Program, Qualified Personnel, Retention Basins, Sediment and Sediment Basins, Uncontaminated.
- E. Part I.B.3 Responsibility of the Operator has been added.
- F. Part I.B.4 Where to submit information has been added for clarification.
- G. Part I.B.5 was added to allow for Qualifying Local Program (QLP) to be added. A QLP would be authorized to permit small construction sites within their jurisdiction
- H. Part I.B.6 has been updated to clarify the requirements for coverage, such as clarifying the requirement that a complete SWPPP, in accordance with Part II. A, be submitted prior to issuance of permit and clarifying the stormwater permitting exemption for smaller construction sites that disturb less than one acre that are not part of a larger common plan of development.

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- I. Part I.B.8 has been added to include posting requirements for the sites.
- J. Part I.B.9 has been added to verify that the local authorities have the authority to request project information.
- K. Part I.B.10 has been moved from Part I.C.1 (Allowable Non-Stormwater Discharges).
- L. Part I.B.11 has been moved from Part I.B.3 (Limitations on Coverage).
- M. Part I.B.11.E has been updated to address the requirements for construction sites that discharge into an impaired receiving stream that is on the 303(d) list.
- N. Part I.B.11.F has been updated to clarify endangered species requirements.
- O. Part I.B.12. (Trench and Ground Water Control) has been added.
- P. Part I.B.13 (Buffer Zones) has been added.
- Q. Part I.B.14 (Notice of Termination (NOT)) was updated to only allow termination of permit coverage after 100% of all the construction activities are complete and the site has reached final stabilization.
- R. Part I.B.15 (Responsibilities of the Operator of a Larger Common Plan of Development for a Subdivision) has been added to clarify the conditions that must be met before an operator can terminate permit coverage for a larger common plan or subdivision.
- S. Part I.B.21 (Maintenance) was added to clarify the difference in maintenance activities and construction activities.
- T. Part II.A. was revised to include a SWPPP template or order requirement.
- U. Part II.A.3 was modified to include a requirement that changes to the SWPPP must be made within seven (7) business days. In addition, the section was updated to clarify the instances when a SWPPP modification would be required.
- V. Part II.A.4 was reorganized.
- W. Part II.A.4.A (Site Description) has been updated to include additional requirements for the site description.
- X. Part II.A.4.B (Responsible Parties) has been added to identify those working on the site that should be contacted.
- Y. Part II.A.4.D TMDL information and requirements have been moved from Part II.A.4.f.
- Z. Part II.A.4.E Attainment of water quality standards after authorization has been moved from Part II.A.4.g.
- AA. Part II.A.4.F Endangered species requirements have been moved from Part II.A.4.a.vii.
- BB. Part II.A.4.G (Site Map) has been moved from Part II.A.4.a.v and expanded to include additional requirements.
- CC. Part II.A.4.G.4 was added to require that the site map indicate construction entrances and exits.
- DD. Part II.A.4.G.6 was added to require that the site map contained in the SWPPP show "Locations of off-site materials, waste, borrow area, or equipment storage area."
- EE. Part II.A.4.G.7 was added to include the site map to show concrete washout areas.
- FF. Part II.A.4.G.11 was added to require that the site map contained in the SWPPP show the "Areas where final stabilization has been accomplished and no further construction phase permit requirements apply."
- GG. Part II.A.4.H Stormwater controls has been moved from Part II.A.4.b and expanded to include additional requirements.
- HH. Part II.A.4.H.1 has been updated to include to language for clearing a larger common plan and maintenance requirements for control measures.
- II. Part II.A.4.H.2.b has been added to include clarification on buffer zones for streams, creeks, rivers and lakes.
- JJ. Part II.A.4.H.2.d has been added to require that there be a record of stabilization for the major activities taking place on the site.
- KK. Part II.A.4.H.2.e has been added to indicate that there are time requirements for stabilization.
- LL. Part II.A.4.H.3.a.(1) has been updated to provide clarification on sediment basins.
- MM. Part II.A.4.H.3.b has been moved from Part II.4.b.ii.B. It has also been updated to include all drainage areas to a common point greater than or equal to ten (10) acres must have a sediment basin.
- NN. Part II.A.4.I.2 has been updated to include the use of a stabilized construction entrance/exit for off-site tracking of sediment minimization.
- OO. Part II.A.4.I.5 has been added to require concrete washout controls.
- PP. Part II.A.4.I.6 has been added to require fuel storage areas, hazardous waste storage and truck wash areas be addressed in the written portion of the SWPPP.
- QQ. Part II.A.4.J has been moved from Part II.A.5 (Non-stormwater discharges).
- RR. Part II.A.4.K has been moved from Part II.A.4.b.ii (Post-Construction Stormwater Management).

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- SS. Part II.A.4.L has been moved from Part II.A.4.c (Approved State or Local Plans).
- TT. Part II.A.4.M (Inspections) has been updated to require a rain gauge on-site to ensure inspections are conducted at the required intervals and inspections every seven days or within 24 hours of 1/2 inch of rainfall or more.
- UU. Part II.A.4.M.2 has been added to require that all site inspections conducted use the ADEQ inspection form or contain the minimum requirements.
- VV. Part II.A.4.M.3 has been added to clarify permit requirements where snow cover exists and snow is not melting.
- WW. Part II.A.4.N (Maintenance) has been moved from Part II.A.4.d and modified to allow three business days for maintenance on controls.
- XX. Part II.A.5, the contractor certification has been removed from the permit.
- YY. Part II.A.6 has been added to include a requirement that the inspector for the site be identified.
- ZZ. Part II.A.7 (Plan Certification) has been added to clarify that the certification must be included with the SWPPP.
- AAA. Part II.B.9.A.1.b has been revised to include updated language with respect to federal regulation.
- BBB. Part II.B.21 has been added to authorize dischargers to comply with local requirements.
- CCC. The Notice of Intent (NOI) form has been revised.
- DDD. The Notice of Coverage (NOC) Postings have been revised.

## 2. Regulatory Background

The federal stormwater regulations contained in 40 CFR 122.26 require NPDES permit coverage for small (1 – 5 acre) and large (greater than 5 acre) construction sites.

## 3. Permit Coverage

Facilities covered by this general permit include those facilities which engage in construction activities greater than one (1) acre in size or less than one (1) acre that is part of a larger common plan.

A. This general permit shall not apply to activities:

- 1) That originate from the site after construction activities have been completed and the site has undergone final stabilization.
- 2) Discharges that are mixed with sources of non-stormwater.
- 3) Stormwater discharges from construction sites that the Director has determined to be or may reasonably be expected to be contributing to a violation of a water quality standard.
- 4) Stormwater discharges from construction sites if the discharge or clearing activities are likely to adversely affect a listed endangered or threatened species or its critical habitat.
- 5) Discharges which are not in compliance with the Endangered Species Act (ESA).
- 6) Discharges to receiving waters listed as impaired on the 303(d) list, of which the SWPPP and selected BMPs do not sufficiently protect water quality.

B. Notice of Intent (NOI)

- 1) Large Construction Sites (greater than 5 acres)

Written notification from new dischargers shall be submitted to the Department at least two (2) weeks prior to the proposed discharge. Unless the applicant is notified otherwise by the Director within two (2) weeks of the notification being deemed complete, authority to discharge under this general permit will become effective.

- 2) Sites with Automatic Coverage

Small site and sites that are less than one (1) acre but part of a larger common plan are automatically covered under the provisions of this general permit. All conditions set forth in Part II.A should be followed and the site should be clearly posted with the Site Notice.

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- 3) The Notice of Intent (NOI) contains the following information:
- a. Operator (Permittee) information ( name, address, telephone and fax numbers, E-mail address)
  - b. Whether the operator is a federal, state, private, public, corporation, or other entity
  - c. Application Type: New or renewal
  - d. Invoice mailing information (Name, address, and telephone and fax numbers)
  - e. Project Construction site information (Name, county, address, contact person, direction to site, latitude and longitude for the entrance of the site or the endpoints for lineal project (in degrees, minutes, and seconds), estimated construction start date and completion date through site final stabilization, estimated of the total project acreage and the acreage to be disturbed by the operator submitting the NOI to the nearest ½ acres, type of the project (subdivision, school, etc), project part of a larger common plan of development
  - f. Discharge information (Name of the receiving stream, ultimate receiving stream, name of municipal storm sewer system)
  - g. Previous/Current permit information
  - h. The Certification statement and signature of a qualified signatory person in accordance with 40 CFR 122.22, as adopted by reference in APCEC Regulation No. 6
  - i. The certification of the facility corporation
  - j. Other information (location of the SWPPP).

### C. Termination of a Qualifying Local Program:

- 1) **Termination Approval.** A Qualifying Local Program may be terminated by either the Department or the municipality. Upon termination of Department approval of a Qualifying Local Program, any construction site must meet the requirements of this permit.
- 2) **Expiration Approval.** Department approval of a Qualifying Local Program will expire with this general permit. Any municipality desiring to continue Department approval of their program must reapply by 6 weeks after the effective date of the permit. The Division will determine if the program may continue as an approved Qualifying Local Program.

### D. Individual Permits

The ADEQ may consider the issuance of individual permits according to the criteria in 40 CFR 122.28(b)(3). These criteria include:

- 1) the discharge(s) is a significant contributor of pollution,
- 2) the discharger is not in compliance with the terms and conditions of the general permit,
- 3) a change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source,
- 4) effluent limitation guidelines are subsequently promulgated for the point sources covered by the general permit,
- 5) a Water Quality Management Plan containing requirements applicable to such point sources is approved, or
- 6) the requirements listed in 40 CFR 122.28(a) and identified in the previous paragraphs are not met.

## 4. **Discharge Characterization**

Stormwater runoff is caused due to soil disturbing activities, stormwater runoff from construction sites have the potential to be heavily laden with silt, sediment, and debris. This runoff is then discharged to creeks, rivers, lakes, ponds, municipal stormwater drainage systems, etc.

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## 5. Technology Requirements

National guidelines establishing BPT, BCT, and BAT standards have not been promulgated for stormwater discharges from construction activities. In accordance with 40 CFR 122.44(k) and 40 CFR 122.44 (s), the general permit includes requirements for the development and implementation of Stormwater Pollution Prevention Plans (SWPPPs) along with Best Management Practices (BMPs).

## 6. Water Quality Requirements

In accordance with 40 CFR 122.44(d), the general permit must include any requirements necessary to achieve State Water Quality Standards as established under Section 303 of the Clean Water Act. Discussed below are the requirements based on State Water Quality Standards.

- A. Discharges to waters for which there is a total maximum daily load (TMDL) allocation are not eligible for coverage under this permit unless you develop and certify a stormwater pollution prevention plan (SWPPP) that is consistent with the assumptions and requirements in the approved TMDL. To be eligible for coverage under this general permit, operators must incorporate into their SWPPP any conditions applicable to their discharges necessary for consistency with the assumptions and requirements of the TMDL within any timeframes established in the TMDL. If a specific numeric wasteload allocation has been established that would apply to the project's discharges, the operator must incorporate that allocation into its SWPPP and implement necessary steps to meet that allocation.
- B. Discharges that the Department, prior to authorization under this permit, determines will cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. Where such a determination is made prior to authorization, the Department may notify you that an individual permit application is necessary in accordance with Part I.B.4. However, the Department may authorize coverage under this permit after inclusion of appropriate controls and implementation procedures in the SWPPP designed to bring the discharge into compliance with water quality standards.

## 7. BMP Requirements and Basis

Numeric discharge limits are not imposed by this general permit. The permit language is included to ensure that those seeking coverage under this general permit select, install, implement, and maintain BMPs at their construction site that will be adequate and sufficient to meet water quality standards for all pollutants of concern. The ADEQ has determined that BMPs, when properly selected, installed, implemented, and maintained do provide effluent quality that can meet WQS based on 40 CFR 122.44(k).

## 8. Inspections

Monitoring requirements are not imposed by this general permit in accordance with the stormwater federal regulations contained in 40 CFR 122.26. However, inspections of the permitted area are required every 7 days or once every 14 days and within 24 hours after a ½ inch of rainfall.

## 9. Other Conditions

### A. Geographic Area and Covered Facilities

The general permit, when issued, will authorize stormwater discharges from construction activities throughout the State of Arkansas to all receiving waters. The permit will be applicable only to facilities which have direct discharges to waters of the State and are therefore subject to the requirements of Section 301 and 402 of the Clean Water Act.

### B. Eligibility and Authorization

An operator engaged in construction activity greater than 1 acre in size in the State of Arkansas is eligible for coverage under this general permit.

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## C. Expiration Date

This general permit will expire three (3) years from the original effective date of the permit.

## 10. Sources.

The following sources were used to draft this permit:

- A. 40 CFRs 122 and 125.
- B. APCEC Regulation No. 2.
- C. APCEC Regulation No. 6.
- D. APCEC Regulation No. 8.
- E. APCEC Regulation No. 9.
- F. Ohio EPA permit #OHC000002.
- G. U.S. EPA Stormwater web page.
- H. State of Arizona Permit #AZG2003-001 and Notice of Intent.
- I. Iowa Waste Reduction Center/University of Northern Iowa document #IAC 567-64.13.
- J. Colorado Stormwater discharge permit #COR-030000.
- K. Missouri State Operating General Permit #MO-R101000.
- L. Montana Department of Environmental Quality Permit #MTR100000.
- M. Georgia Soil and Water Conservation Commission Permit #GAR100001, GAR100002, & GAR100003.
- N. Definitions from <http://www.projectbrays.org/detention.html>
- O. Stakeholders meetings held 01/15/2008 & 02/12/2008.
- P. EPA BMP Manual

## 11. Reaffirmation of Permit Coverage.

- A. Large Sites: Any permittee with coverage under this general permit at the time of expiration will continue to have coverage until a renewal general permit is effective. A tracking number can not be issued after the expiration date to new discharges. Therefore, the Department urges new dischargers to submit a complete application as soon as possible, but no later than 2 weeks prior to the expiration date of this permit. Upon issuance of a new or different general permit for all of the stormwater discharges covered by this permit, the permittee is required to notify the Department of their intent to be covered under this new permit within 60 days after the effective date. All permittees must submit a new NOI after the renewal permit effective date, even if the Department has an existing NOI on file for the discharge.
- B. Automatic Coverage Sites: Operators of a site with automatic coverage are responsible for ensuring that the site is in compliance with any changes or updates of this general permit, by either contacting ADEQ or reviewing the ADEQ website: [http://www.adeg.state.ar.us/water/branch\\_npdes/stormwater/construction/construction.htm](http://www.adeg.state.ar.us/water/branch_npdes/stormwater/construction/construction.htm) .

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**APPENDIX D**

**SWPPP TEMPLATE**

This template is provided for Storm Water Pollution Prevention Plans was developed by AHTD and approved for use by ADEQ.

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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

JOB XXX

STORM WATER POLLUTION PREVENTION PLAN

National Pollution Discharge Elimination System  
General Permit # ARR150000

Prepared for:

ARKANSAS STATE HIGHWAY & TRANSPORTATION DEPARTMENT

Date: \_\_\_\_\_

## General Information:

A Storm Water Pollution Prevention Plan (SWPPP) has been developed by the AHTD for this construction project in accordance with good engineering practice. Various items constitute the SWPPP for the project and should be provided for persons requesting to view the SWPPP, including:

- a) *The AHTD Standard Specifications for Highway Construction, 2003 Edition, (Standard Specifications).* The following sections are in reference to water quality or sediment and erosion control: Sections 107, 110, 620, 621, 622, 623, 624, 626, and other sections pertaining to storm water controls.
- b) The Construction Plans contain temporary and permanent erosion controls and permanent storm water management measures.
- c) Contract documents provide the Contractor and AHTD with additional specifications. These may include Supplemental Specifications and Special Provisions. Parts of the SWPPP that may be in the Contract include this Special Provision, *Storm Water Pollution Prevention Plan*, and a copy of the Notice of Intent (NOI).
- d) Project records including SWPPP inspection reports, the authorized Site Manager daily work report, and various pay quantity documentation, all of which detail the progression of work on the project, when erosion control measures were taken, when the Contractor was given instructions to install or maintain the erosion and sediment control (E&SC) items, and the timing and details of E&SC installation. The Contractor identification form and the Inspector identification form are included as part of the project records.
- e) Construction site posting.
  - i. For large construction sites (all sites five acres or above) - a signed copy of the ADEQ Notice of Intent (NOI) found in the project contract, to be replaced by the completed Arkansas Department of Environmental Quality (ADEQ) Authorization Letter to Discharge Stormwater when it is sent by ADEQ.
  - ii. For small construction sites under five acres (automatic coverage sites) - the completed ADEQ Notice of Coverage for small sites from the ADEQ website.

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## ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT JOB XXX STORM WATER POLLUTION PREVENTION PLAN

### Project Name and Location:

Insert Project name and job number from Contract

### Operator Name and Address:

Arkansas Highway and Transportation Department

Name of District Engineer \_\_\_\_\_

Address of District Headquarters  
\_\_\_\_\_  
\_\_\_\_\_

Name of Resident Engineer (Contact Person) \_\_\_\_\_

Contact Number \_\_\_\_\_

### A. Site Description

1) Pre-construction Topographic view: Refer to the plan and profile sheets for topographic and waterbody information.

2) Project Description and Intended Use after Notice of Termination (NOT) is filed: *Insert description from Contract.*

3) Sequence of Activities:

The sequence of Major Soil Disturbing Activities is shown below. **Be aware that the sequence below is provided as a general course of action for the progression of construction activities. Actual sequence of construction will be determined by the Contractor's schedule and field conditions.**

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_
- e. \_\_\_\_\_

4) Total Acres Available: \_\_\_\_\_ Total Disturbed Area \_\_\_\_\_

(\*Note: Any off-site borrow or waste areas are operated by the Contractor, who is responsible for obtaining any required NPDES permits for the sites. The "total acres available" and "total disturbed areas" shown here do not include areas covered under permits obtained by another operator. The Contractor is also responsible for meeting local regulations regarding these sites, including those of a Qualifying Local Program).

5) Existing Site Information:

a. Runoff Coefficient Based on attachment C:

Before construction starts, the site has a runoff coefficient of \_\_\_\_\_

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After construction is completed, the site will have a runoff coefficient of \_\_\_\_\_

b. Soil Information \_\_\_\_\_

c. No data exists on the quality of storm water discharging from the site.

### B. Responsible Parties-General Contractors, Inspectors, etc:

Refer to Contractor identification form in Section O and the Inspector identification form in Section P. This information will be completed after the Pre-construction conference.

### C. Receiving Waters: (Permit pg 19 of Part II)

#### 1) Location of Surface Water on Construction Site:

The following surface waters are located on the construction site. List them by name with Station Numbers.

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

#### 2) The following bodies of water receive runoff from the construction site:

Name of Operator of Municipal Storm Sewer and/or Receiving Stream: \_\_\_\_\_

Name of Ultimate Receiving Water: \_\_\_\_\_

Wetland acreage at site, if any: \_\_\_\_\_

Waterbodies that would require the fifty (50) foot buffer zone are Extraordinary Resource Waters (ERW), Ecologically Sensitive Waterbodies (ESW), Natural and Scenic Waterways (NSW), and/or other uses at the discretion of the Director of ADEQ.

Above categorized waterbodies, if any on project: \_\_\_\_\_

### D. TMDL and 303(d) list can be found at:

[http://www.adeg.state.ar.us/water/branch\\_planning/default.htm](http://www.adeg.state.ar.us/water/branch_planning/default.htm)

1) 303 (d) Listed Waters - Select the following appropriate statement utilizing information received from the Environmental Division.

#### Statement 1:

\_\_\_\_\_ Storm water discharges from this site do not enter a water body on the list of waters impaired for turbidity/oil and grease on the 303(d) list.

#### Statement 2:

\_\_\_\_\_ Storm water discharges from this construction site enter a water body on the list of impaired water bodies (303d list) for turbidity/oil and grease. The SWPPP has been developed with BMPs which are designed to minimize the discharge of these pollutants to the maximum extent practicable. Condition of sediment

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## ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT JOB XXX STORM WATER POLLUTION PREVENTION PLAN

control BMPs will be monitored during regular inspections to ensure this goal is met.

2) TMDL Waters - Select the following appropriate statement utilizing information received from the Environmental Division.

Statement 1:

\_\_\_\_\_ Storm water discharges from this site do not enter a water body with an approved TMDL for turbidity or oil and grease.

Statement 2:

\_\_\_\_\_ Storm water discharges from this construction site enter a water body with an established TMDL allocation for turbidity and/or oil and grease. A TMDL has been written for the water body that is applicable to the construction project. The following information documents the construction projects compliance with the TMDL:

1.) List TMDL assumptions and allocations: \_\_\_\_\_

2.) List measures taken to ensure that the discharge of pollutants from the site is consistent with the assumptions and allocations of the TMDL. \_\_\_\_\_

If storm water from the project discharges to a water body with an approved TMDL and/or 303d listed waterbody, ADEQ could require a fifty foot undisturbed buffer zone adjacent to the water body.

**E. Attainment of Water Quality Standards after Authorization:** (Permit pg 20 of Part II)  
ATTAINMENT OF WATER QUALITY STANDARDS AFTER AUTHORIZATION - BMP's have been selected and will be installed and maintained at the construction site that will minimize the discharge of pollutants as necessary to meet applicable water quality standards.

**F. Endangered Species:**

Endangered species clearance is obtained during the National Environmental Policy Act (NEPA) process for all AHTD projects and is conducted in accordance with Section 7 of the Endangered Species Act. Further information about this process can be obtained by contacting the AHTD Environmental Division at (501)569-2522, or the U. S. Fish and Wildlife Service at (501) 513-4488.

**G. Site Map:** See Attachment A for items to be included. All of these items should be marked on the job plans maintained for the SWPPP.

**H. Stormwater Controls**

1. Initial Site Stabilization, Erosion, & Sediment Controls: (Permit pg 21 of Part II)

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Complete descriptions and specifications for control measures may be found in the AHTD's Standard Specifications for Highway Construction, Supplemental Specifications, Special Provisions, Construction Contract, and Construction Plans. **All controls are designed and installed with the primary goal of retaining sediment on site to the maximum extent practicable.**

Insert a description below of the construction activities that are a part of the initial site disturbance and stabilization, along with the appropriate controls measures and time of installation for that activity. This information should be provided by the Contractor at the Pre-construction meeting.

Be aware that the list is general. Actual timing of erosion control installations will be determined daily based upon the construction activity occurring and actual field conditions.

(Construction Activity/Control/Timing)

- 1)
- 2)
- 3)
- 4)
- 5)

### 2. Stabilization Practices: (Permit pg 21 of Part II)

List of Stabilization Practices to be utilized and scheduling of implementation for that practice:

- Dust control - wet down dusty areas as needed/ongoing
- Erosion control matting - \_\_\_\_\_
- Geotextiles - \_\_\_\_\_
- Limiting disturbed area - will be limited by Engineer as discussed in Section 110.06(d) of Standard Specifications/ongoing
- Mulches - \_\_\_\_\_
- Mulch control netting - \_\_\_\_\_
- Off-site tracking controls (Either stabilized exits and/or wheel washing)\*
- Preserving existing vegetation - as shown on the job plans/ongoing
- Sod stabilization - \_\_\_\_\_
- Temporary and permanent seeding - within 14 days of temporarily ceasing construction activity on a portion of the site if construction will not resume within 21 days

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## ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT JOB XXX STORM WATER POLLUTION PREVENTION PLAN

\_\_\_\_\_ Vegetative buffer zone –(Will be established along waterbodies with at least 25 feet for any unnamed streams, creeks, rivers, lakes or other waterbodies and at least 50 feet for an established TMDL waterbody, streams listed on the 303d list, an ERW, ESW, NSW, and any others at the discretion of the Director of ADEQ. If encroachment is necessary within these required buffer zones, briefly describe the reason why.)

\_\_\_\_\_  
\_\_\_\_\_.

When encroachment occurs additional measures will be taken to protect the waterbody and the contractor will be required to stabilize the disturbed area within the buffer zone within 5 business days of completion of work.

\_\_\_\_\_ Slope Tracking- \_\_\_\_\_

\_\_\_\_\_ Other - \_\_\_\_\_

\*Stabilized exits will use either suitable sized rock as directed by the Engineer or manufactured devices designed to reduce the amount of soil being tracked off-site.

### 3. Structural Practices: (Permit pg 22 of Part II)

List of Structural Practices to be utilized and scheduling of implementation for that practice:

\_\_\_\_\_ Sediment basins\* (to be utilized whenever 10 or more acres drain from common drainage locations on the site, unless not attainable. If not attainable, briefly describe reason(s) that a basin was not used) - \_\_\_\_\_

\_\_\_\_\_ Curb & gutter - \_\_\_\_\_

\_\_\_\_\_ Ditch checks\*\* - \_\_\_\_\_

\_\_\_\_\_ Diversion ditches - \_\_\_\_\_

\_\_\_\_\_ Drainage swales - \_\_\_\_\_

\_\_\_\_\_ Drop inlet silt fences - \_\_\_\_\_

\_\_\_\_\_ Erosion control Matting - \_\_\_\_\_

\_\_\_\_\_ Gabions - \_\_\_\_\_

\_\_\_\_\_ Inlet & outlet protection - \_\_\_\_\_

\_\_\_\_\_ Silt fences - \_\_\_\_\_

\_\_\_\_\_ Slope drains - \_\_\_\_\_

\_\_\_\_\_ Storm sewer - \_\_\_\_\_

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### STORM WATER POLLUTION PREVENTION PLAN

\_\_\_\_\_ Retaining walls - \_\_\_\_\_

\_\_\_\_\_ Velocity Dissipators - \_\_\_\_\_

\_\_\_\_\_ Other - \_\_\_\_\_

\* Sediment will be removed from basins when design capacity is reduced by 50%. In addition, when a sediment basin is utilized per permit requirements the procedures for the removal of a sediment basin can be found in the Standard Specifications section 621.03(K).

\*\*Hay/Straw bales will not be used in areas of concentrated flow.

**I. Other Controls:** In addition to erosion control and storm water management, our plan will include measures to properly manage solid wastes, hazardous wastes, dust generation, and all other activities that will generate wastes during the construction phase. (Permit pg 23 of Part II)

1) Solid material control, debris and wastes:

Waste Disposal. All solid materials discharged to waters of the United States shall be in accordance with Section 110 of the Standard Specifications, the applicable Section 404 Special Provisions in the Job Contract, the plans, and as authorized by a US C of E Section 404 Permit. Litter and construction debris will be prevented from becoming a pollutant source for storm water discharges. Any debris which inadvertently enters a water of the state will be removed daily.

2) Offsite vehicle tracking:

Off-site vehicle tracking. Each vehicle exit from the construction site must either be stabilized or use wheel washing to prevent the tracking of material onto the public roadway. (If sediment escapes the construction site through tracking, it will be removed by sweeping frequently enough to minimize off-site impacts to water bodies.)

3) Temporary sanitary facilities:

Facilities will be provided and properly maintained by the Contractor in accordance with Section 107.06 of the Standard Specifications.

4) Concrete waste area:

Designated concrete washout waste area(s) will be established and utilized to prevent liquid concrete waste from being discharged to a water of the state.

5) Fuel storage, hazardous materials and truck washing areas:

The following is a list of materials which could be potential sources of pollution in storm water runoff: asphalt materials, concrete, cement, concrete wash water, paint, solvents, petroleum products, fertilizers, concrete curing compound, lime, linseed oil, asphalt additives, concrete additives, and sewage. Handling of the above materials or other potential pollutants shall be in accordance with Subsection 110.07, Pollutants, of the Standard Specifications.

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## ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT JOB XXX STORM WATER POLLUTION PREVENTION PLAN

### J. Non-stormwater Discharges: (Permit pg 10 of Part I)

List of Anticipated Allowable Non-Stormwater Discharges\*:

- 1) Water used to wash vehicles (where detergents or other chemicals are not used) or control dust in accordance with Part II.A.4.1.2
- 2) Landscape Irrigation

\*Other Allowable Non-Stormwater Discharges are listed in the Permit Part I.B.10, but there is no reasonable anticipation of these discharges at this time.

### K. Post-Construction Stormwater Management: (Permit pg 24 of Part II)

Permanent Storm Water Management - List of devices to be utilized for storm water infiltration and management:

<input type="checkbox"/> Channel linings	<input type="checkbox"/> Concrete ditch paving
<input type="checkbox"/> Culverts	<input type="checkbox"/> Curb and gutter
<input type="checkbox"/> Detention basins	<input type="checkbox"/> Drop inlets
<input type="checkbox"/> Dumped riprap	<input type="checkbox"/> Floodgates
<input type="checkbox"/> Gabions	<input type="checkbox"/> Grassed swale
<input type="checkbox"/> Inlet & outlet protection	<input type="checkbox"/> Permanent seeding
<input type="checkbox"/> Retention pond	<input type="checkbox"/> Riprap
<input type="checkbox"/> Solid sodding	<input type="checkbox"/> Storm sewer
<input type="checkbox"/> Topsoil replacement	<input type="checkbox"/> Underdrains
<input type="checkbox"/> Velocity dissipators	<input type="checkbox"/> Wetland creation
<input type="checkbox"/> Other-list _____	

Velocity dissipation devices:

<input type="checkbox"/> Concrete spillways	<input type="checkbox"/> Grouted riprap
<input type="checkbox"/> Permanent seeding & mulch	<input type="checkbox"/> Underdrains
<input type="checkbox"/> Solid sodding	<input type="checkbox"/> Concrete ditch paving
<input type="checkbox"/> Dumped riprap	<input type="checkbox"/> Detention basins
<input type="checkbox"/> Velocity dissipators	<input type="checkbox"/> Wetland infiltration
<input type="checkbox"/> Other-list _____	

### L. State or Local Plans: (Permit pg 24 of Part II)

The Arkansas State Highway Commission and the Arkansas State and Highway Transportation Department have the exclusive authority over the state highway system (See Ark. Code Ann. § 27-67-101, et al), therefore no local agencies would have authority or jurisdiction over the lands owned, controlled and maintained by the AHTD. The AHTD will

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## ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT JOB XXX STORM WATER POLLUTION PREVENTION PLAN

make every effort to address any concerns of local entities concerning storm water discharges from the state highway right of way.

This authority does not extend to the Contractor's off-site operations. The Contractor is responsible for complying with all State and Local Plans in accordance with Section 107.01 of the Standard Specifications.

### M. Inspections: (Permit pg 24 of Part II)

Inspections will be conducted by a qualified inspector at the following frequency:

Every 7 days or

Every 14 Days and within 24 hours after a ½ inch or greater rainfall event.

A report of the inspection will summarize the scope of the inspection, the name of the inspector, the date of inspection and any damages observed and repairs made to any control measure. Completed inspection forms will be kept with the SWPPP.

The following are the minimum inspection, maintenance and reporting practices that will be used to maintain erosion and sediment controls at the construction site:

1. Inspection form (Attachment B).
2. All erosion and sediment control measure will be maintained in good working order. If repair is necessary, it will be initiated **within 72 hours of discovery**.
3. All controls will be inspected to ensure that they meet the manufacture's specifications.
4. Sediment basins and sediment traps will be cleaned out when they reach 50% of the original capacity.
5. All site entrances and exits will be checked to ensure no off-site tracking.
6. All inspection reports will be maintained for a minimum of 3 years after permit termination.
7. In addition to inspection, records will be kept of the following:
  - a. Dates when major grading activities occur,
  - b. Dates when construction activities cease in an area, temporarily or permanently,
  - c. Dates when an area is stabilized, temporarily or permanently.

**N. Maintenance:** All erosion and sediment control measures will be maintained in good working order. If a repair is necessary, it will be initiated **within three (3) business days of discovery**. (Permit pg 25 of Part II)

However, if conditions do not permit large equipment to be used, a longer time frame is allowed if the condition is thoroughly documented on the inspection form as stated in the Permit Part II.4.N.



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STORM WATER POLLUTION PREVENTION PLAN

**P. Inspectors:** (Permit pg 25 of Part II)

Site inspectors should be identified in the plan.

AHTD inspectors performing the erosion and sediment control inspection must complete the information below.

Printed Name of AHTD Inspector	Signature	Contact Number	Date

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**STORM WATER POLLUTION PREVENTION PLAN**

**Q. Plan Certification:** (Permit pg 26 of Part II) (To be completed by a duly authorized representative or the cognizant official.)

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Note: For this permit only, "this document" refers to the Stormwater Pollution Prevention Plan, "attachments" refers to the site map and inspection forms, and "system" is referencing the project site.

Printed Name: \_\_\_\_\_

Printed Title: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

# 2008 EROSION AND SEDIMENT CONTROL DESIGN AND CONSTRUCTION MANUAL

Please note that Attachments C-E do not have to be submitted with the SWPPP.

## Attachment A

### Site Map

Showing at a minimum the following items:

1. Direction of stormwater flow;
2. Areas of soil disturbance and areas not to be disturbed;
3. Location of major structural and nonstructural controls;
4. Main construction entrance and exit;
5. Location where stabilization practices are expected to occur;
6. Locations of off-site materials, storage, waste or borrow areas;
7. Locations of areas used for concrete wash-out;
8. Location of all surface water bodies (including wetlands);
9. Locations where stormwater is discharged to a surface water and/or municipal separate storm sewer system, if applicable;
10. Locations where stormwater is discharged off-site (should be continuously updated); and
11. Areas where final stabilization has been accomplished and no further construction will take place.

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**Attachment B**

**STORMWATER POLLUTION PREVENTION PLAN  
INSPECTION AND MAINTENANCE REPORT FORM**

AHTD's approved inspection form is on file with ADEQ.

Completed inspection forms will be found in AHTD's Sediment and Erosion Control Manual, in the section tabbed "Inspections".

**For additional information, please use a separate page.**

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## ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT JOB XXX STORM WATER POLLUTION PREVENTION PLAN

### Attachment C

#### Computation Sheet for Determining Runoff Coefficients

$$\text{Total Site Area} = \underline{\hspace{2cm}} \text{ Acres} \quad (\text{A})$$

#### *Existing Site Conditions*

$$\text{Impervious Site Area}^1 = \underline{\hspace{2cm}} \text{ Acres} \quad (\text{B})$$

$$\text{Impervious Site Area Runoff Coefficient}^{2,4} = \underline{\hspace{2cm}} \quad (\text{C})$$

$$\text{Pervious Site Area}^3 = \underline{\hspace{2cm}} \text{ Acres} \quad (\text{D})$$

$$\text{Pervious Site Area Runoff Coefficient}^4 = \underline{\hspace{2cm}} \quad (\text{E})$$

$$\text{Existing Site Area Runoff Coefficient} \frac{(B \times C) + (D \times E)}{(A)} = \underline{\hspace{2cm}} \quad (\text{F})$$

#### *Proposed Site Conditions (after construction)*

$$\text{Impervious Site Area}^1 = \underline{\hspace{2cm}} \text{ Acres} \quad (\text{G})$$

$$\text{Impervious Site Area Runoff Coefficient}^{2,4} = \underline{\hspace{2cm}} \quad (\text{H})$$

$$\text{Pervious Site Area}^3 = \underline{\hspace{2cm}} \text{ Acres} \quad (\text{I})$$

$$\text{Pervious Site Area Runoff Coefficient}^4 = \underline{\hspace{2cm}} \quad (\text{J})$$

$$\text{Proposed Site Area Runoff Coefficient} \frac{(G \times H) + (I \times J)}{(A)} = \underline{\hspace{2cm}} \quad (\text{K})$$

1. Includes paved areas, areas covered by buildings, and other impervious surfaces.
2. Use 0.95 unless lower or higher runoff coefficient can be verified.
3. Includes areas of vegetation, most unpaved or uncovered soil surfaces, and other pervious areas.
4. Refer to local Hydrology Manual for typical C values.

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## ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT JOB XXX STORM WATER POLLUTION PREVENTION PLAN

### Attachment D

#### Computational Sheet for Determining Run-on Discharges

#### Existing Site Conditions

Area Runoff Coefficient = \_\_\_\_\_ (A)

Area Rainfall Intensity = \_\_\_\_\_ in/hr (B)

Drainage Area = \_\_\_\_\_ Acres (C)

Site Area Run-on Discharge (A) x (B) x (C) = \_\_\_\_\_ ft<sup>3</sup>/sec (D)

# 2008 EROSION AND SEDIMENT CONTROL DESIGN AND CONSTRUCTION MANUAL

## Attachment E

### BMP Consideration Checklist

<b>CONSTRUCTION SITE BMPs CONSIDERATION CHECKLIST</b>					
The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP must be checked as "Not Used" with a brief statement describing why it is not being used.					
<b>EROSION CONTROL BMPs</b>					
BMP No.	BMP	CONSIDERED FOR PROJECT	CHECK IF USED	CHECK IF NOT USED	IF NOT USED, STATE REASON
EC-1	Scheduling	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
EC-2	Preservation of Existing Vegetation	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
EC-3	Hydraulic Mulch	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
EC-4	Hydroseeding	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
EC-5	Soil Binders	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
EC-6	Straw Mulch	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
EC-7	Geotextiles & Mats	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
EC-8	Wood Mulching	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
EC-9	Earth Dikes & Drainage Swales	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
EC-10	Velocity Dissipation Devices	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
EC-11	Slope Drains	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
EC-12	Stream bank Stabilization	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____

## 2008 EROSION AND SEDIMENT CONTROL DESIGN AND CONSTRUCTION MANUAL

<b>CONSTRUCTION SITE BMPs CONSIDERATION CHECKLIST</b>					
The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP must be checked as "Not Used" with a brief statement describing why it is not being used.					
<b>SEDIMENT CONTROL BMPs</b>					
BMP No.	BMP	CONSIDERED FOR PROJECT	CHECK IF USED	CHECK IF NOT USED	IF NOT USED, STATE REASON
SE-1	Silt Fence	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
SE-2	Sediment Basin	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
SE-3	Sediment Trap	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
SE-4	Check Dam	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
SE-5	Fiber Rolls	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
SE-6	Gravel Bag Berm	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
SE-7	Street Sweeping and Vacuuming	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
SE-8	Sand Bag Barrier	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
SE-9	Straw Bale Barrier	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
SE-10	Storm Drain Inlet Protection	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
SE-11	Chemical Treatment	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>WIND EROSION CONTROL BMPs</b>					
WE-1	Wind Erosion Control	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>TRACKING CONTROL BMPs</b>					
TR-1	Stabilized Construction Entrance/Exit	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
TR-2	Stabilized Construction Roadway	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
TR-3	Entrance/Outlet Tire Wash	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____

## 2008 EROSION AND SEDIMENT CONTROL DESIGN AND CONSTRUCTION MANUAL

<b>CONSTRUCTION SITE BMPs CONSIDERATION CHECKLIST</b>					
The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP must be checked as "Not Used" with a brief statement describing why it is not being used.					
<b>NON-STORM WATER MANAGEMENT BMPs</b>					
BMP No.	BMP	CONSIDERED FOR PROJECT	CHECK IF USED	CHECK IF NOT USED	IF NOT USED, STATE REASON
NS-1	Water Conservation Practices	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
NS-2	Dewatering Operations	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
NS-3	Paving and Grinding Operations	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
NS-4	Temporary Stream Crossing	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
NS-5	Clear Water Diversion	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
NS-6	Illicit Connection/ Discharge	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
NS-7	Potable Water/Irrigation	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
NS-8	Vehicle and Equipment Cleaning	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
NS-9	Vehicle and Equipment Fueling	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
NS-10	Vehicle and Equipment Maintenance	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
NS-11	Pile Driving Operations	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
NS-12	Concrete Curing	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
NS-13	Concrete Finishing	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
NS-14	Material and Equipment Use Over Water	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
NS-15	Demolition Adjacent to Water	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
NS-16	Temporary Batch Plants	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____

## 2008 EROSION AND SEDIMENT CONTROL DESIGN AND CONSTRUCTION MANUAL

<b>CONSTRUCTION SITE BMPs CONSIDERATION CHECKLIST</b>					
The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP must be checked as "Not Used" with a brief statement describing why it is not being used.					
<b>WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs</b>					
BMP No.	BMP	CONSIDERED FOR PROJECT	CHECK IF USED	CHECK IF NOT USED	IF NOT USED, STATE REASON
WM-1	Material Delivery and Storage	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
WM-2	Material Use	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
WM-3	Stockpile Management	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
WM-4	Spill Prevention and Control	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
WM-5	Solid Waste Management	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
WM-6	Hazardous Waste Management	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
WM-7	Contaminated Soil Management	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
WM-8	Concrete Waste Management	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
WM-9	Sanitary/Septic Waste Management	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
WM-10	Liquid Waste Management	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____



**2008 EROSION AND SEDIMENT CONTROL  
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**APPENDIX E**

**SWPPP COMPLETENESS CHECKLIST**

This is a checklist used by ADEQ field Inspectors when reviewing construction sites.

# 2008 EROSION AND SEDIMENT CONTROL DESIGN AND CONSTRUCTION MANUAL

## Storm Water Pollution Prevention Plan (SWPPP) Completeness Checklist

Permittee: \_\_\_\_\_  
 Project Name: \_\_\_\_\_  
 Project City: \_\_\_\_\_

Tracking Number: ARR15 \_\_\_\_\_  
 Location of SWPPP on-site: \_\_\_\_\_

Yes No N/A

Notes

**A. A site description, including:**

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. Pre-construction topographic view	Part II.A.4.A.1
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. Nature of activity and intended use after NOT is filed	Part II.A.4.A.2
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. Sequence of major activities	Part II.A.4.A.3
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4. Total area of site/Disturbed area.	Part II.A.4.A.4
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5. The runoff coefficient of the site after construction is complete.	Part II.A.4.A.5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. Existing soil or storm water data.	Part II.A.4.A.5

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>B. Responsible Parties: All parties dealing with the SWPPP and the areas they are responsible for on-site.</b>	Part II.A.4.B
--------------------------	--------------------------	--------------------------	---	---------------

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>C. Receiving Waters: Site to ultimate waters</b>	Part II.A.4.C
--------------------------	--------------------------	--------------------------	---	---------------

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>D. Documentation of permit eligibility related to Impaired Water Bodies and Total Maximum Daily Loads (TMDLs).</b>	Part II.A.4.D
--------------------------	--------------------------	--------------------------	---	---------------

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. Are there pollutants listed on the 303(d) list or in the TMDLs for the receiving waters?	Part II.A.4.D.1
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. Are any of the pollutants directly related to the site?	Part II.A.4.D.2
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. Measures taken to reduce pollutants from the site.	Part II.A.4.D.3

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>E. Documentation of attainment of Water Quality Standards after authorization.</b>	Part II.A.4.E
--------------------------	--------------------------	--------------------------	---	---------------

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>F. Endangered Species information.</b>	Part II.A.4.F
--------------------------	--------------------------	--------------------------	---	---------------

**G. Site Map showing:**

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. Drainage patterns.	Part II.A.4.G.1
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. Approximate slopes after major grading.	Part II.A.4.G.1
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. Area of soil disturbance.	Part II.A.4.G.2
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4. Outline of areas which will not be disturbed.	Part II.A.4.G.2
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5. Location of major structural and non-structural controls.	Part II.A.4.G.3
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. Location of main construction entrance and exit.	Part II.A.4.G.4
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7. Areas where stabilization practices are expected to occur.	Part II.A.4.G.5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8. Locations of off-site materials, waste, borrow area or storage area.	Part II.A.4.G.6
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9. Locations of areas used for concrete wash-out.	Part II.A.4.G.7
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10. Surface waters.	Part II.A.4.G.8
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11. Locations where water is discharged to a surface water or MS4.	Part II.A.4.G.9
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12. Storm water discharge locations.	Part II.A.4.G.10
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13. Areas where final stabilization has been accomplished.	Part II.A.4.G.11

# 2008 EROSION AND SEDIMENT CONTROL DESIGN AND CONSTRUCTION MANUAL

## Storm Water Pollution Prevention Plan (SWPPP) Completeness Checklist

Permittee: \_\_\_\_\_  
 Project Name: \_\_\_\_\_  
 Project City: \_\_\_\_\_

Tracking Number: ARR15 \_\_\_\_\_  
 Location of SWPPP on-site: \_\_\_\_\_

### H. Description of Controls:

- |                          |                          |                          |  |                   |
|--------------------------|--------------------------|--------------------------|--|-------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 1. Erosion and sediment controls, including:                   |                   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | a. Initial disturbed areas.                                    | Part II.A.4.H.1.a |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | b. Erosion and Sediment controls to retain sediment on-site.   | Part II.A.4.H.1.b |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | c. Replacement of inadequate controls.                         | Part II.A.4.H.1.c |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | d. Removal of off-site accumulations                           | Part II.A.4.H.1.d |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | e. Maintenance of sediment traps/basins @ 50% capacity.        | Part II.A.4.H.1.e |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | f. Litter, construction debris and chemicals properly handled. | Part II.A.4.H.1.f |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | g. Off-site storage areas and controls.                        | Part II.A.4.H.1.g |

- |                          |                          |                          |  |                   |
|--------------------------|--------------------------|--------------------------|--|-------------------|
|                          |                          |                          | 2. Stabilization practices.                    |                   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | a. Description and schedule for stabilization. | Part II.A.4.H.2.a |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | b. Description of buffer areas.                | Part II.A.4.H.2.b |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | c. Records of stabilization.                   | Part II.A.4.H.2.c |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | d. Deadlines for stabilization.                | Part II.A.4.H.2.d |

- |                          |                          |                          |  |                     |
|--------------------------|--------------------------|--------------------------|--|---------------------|
|                          |                          |                          | 3. Structural Practices.   |                     |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | a. Sediment basins   | Part II.A.4.H.3.a.1 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 1. More than 10 acres draining to a common point.  | Part II.A.4.H.3.a.1 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Sediment basin dimensions and capacity description and calculations.   | Part II.A.4.H.3.a.1 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Sediment basin outfall type, size, capacity, etc. calculations.  | Part II.A.4.H.3.a.1 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | If a basin wasn't practicable, are other controls sufficient?  | Part II.A.4.H.3.a.1 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | b. Velocity dissipation devices to provide non-erosive flow conditions from the discharge point along the length of any outfall channel. | Part II.A.4.H.3.b   |

- |                          |                          |                          |  |                 |
|--------------------------|--------------------------|--------------------------|--|-----------------|
|                          |                          |                          | I. Other controls including:   |                 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 1. Waste disposal practices which prevent discharge of solid materials to waters of the State.                     | Part II.A.4.I.1 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 2. Measures to minimize offsite tracking of sediments by construction vehicles.                                    | Part II.A.4.I.2 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 3. Measures to ensure compliance with State or local waste disposal, sanitary sewer, or septic system regulations. | Part II.A.4.I.4 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 4. Does the site have a concrete washout area controls?  | Part II.A.4.I.5 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 5. Does the site have fuel storage areas, hazardous waste storage and/or truck wash areas controls?                | Part II.A.4.I.6 |

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	J. Identification of allowable non-storm water discharges	Part II.A.4.J
--------------------------	--------------------------	--------------------------	---	---------------

			K. Post construction stormwater management.	Part II.A.4.K
--	--	--	---	---------------

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L. State or local requirements incorporated into the plan.	Part II.A.4.L
--------------------------	--------------------------	--------------------------	--	---------------



**2008 EROSION AND SEDIMENT CONTROL  
DESIGN AND CONSTRUCTION MANUAL**

**APPENDIX F**

**DESIGNATION OF SIGNATORY AUTHORITY**

Chief Engineer Letter to ADEQ Identifying Signatory Authority and Cognizant Officials. This identification is a requirement of the Permit and a part of the SWPPP.

**2008 EROSION AND SEDIMENT CONTROL  
DESIGN AND CONSTRUCTION MANUAL**

**ARKANSAS STATE HIGHWAY  
AND  
TRANSPORTATION DEPARTMENT**

Dan Flowers  
Director  
Phone (501) 569-2000 Fax (501) 569-2400



P.O. Box 2261  
Little Rock, Arkansas 72203-2261  
[WWW.ARKANSASHIGHWAYS.COM](http://WWW.ARKANSASHIGHWAYS.COM)

December 17, 2003

Mr. Marcus C. Devine  
Director  
Arkansas Department of Environmental Quality  
P.O. Box 8913  
Little Rock, AR 72219-8913

Dear Mr. Devine:

Reference is made to the NPDES Permit No. ARR150000 regarding Notice of Intent (NOI) signatory requirements.

The Arkansas State Highway and Transportation Department wishes to designate signatory authority and cognizant officials for the permit number referenced above. This general permit is for Owners or Operators of Facilities Discharging Storm Water Associated With Industrial Activity from Construction Sites Located in the State of Arkansas.

Extension of the required site coverage down to one acre will require construction plans designed by the Maintenance Division and the ten districts to also be covered by these permits. We request that the following individuals, or their duly authorized representatives, be granted signatory authority for the certification on the Department's construction permit NOIs.

Roadway Design Division Head  
State Aid Division Head  
Bridge Division Head  
District Engineers  
State Maintenance Engineer

**2008 EROSION AND SEDIMENT CONTROL  
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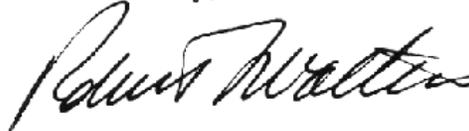
Mr. Marcus Devine  
December 17, 2003  
Page 2

The following individuals should be designated as cognizant officials:

District Construction Engineers  
District Maintenance Engineers  
Facilities Management Engineer  
Resident Engineers  
Assistant Resident Engineers  
Area Maintenance Supervisors

Thank you for your consideration of this matter, and if you have any questions, please contact Brenda Price, the NPDES Coordinator in our Environmental Division at (501) 569-2284.

Yours truly,



Robert L. Walters  
Chief Engineer

RW:JT/al

bc: Assistant Chief Engineer – Planning  
Assistant Chief Engineer – Design  
Assistant Chief Engineer – Operations  
Construction  
Maintenance



**2008 EROSION AND SEDIMENT CONTROL  
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## **APPENDIX G**

### **NOTICES**

A Notice of Intent is to be completed and posted on the site prior to receipt of a Notice of Coverage from ADEQ.

A Notice of Coverage for Large Construction Sites is provided by ADEQ upon filing an acceptable SWPPP and is to be posted on a large or medium site.

A Construction Site Notice for a Site with Automatic Coverage (Small Construction Site) is to be obtained from the ADEQ website and posted on all small (1-5 acres) sites.

A Notice of Termination is to be filed with ADEQ upon permanent stabilization of all disturbed areas of the site. This form is included in the SWPPP template.

# 2008 EROSION AND SEDIMENT CONTROL DESIGN AND CONSTRUCTION MANUAL



## NOTICE OF INTENT FOR DISCHARGES OF STORMWATER ASSOCIATED WITH LARGE CONSTRUCTION ACTIVITY AUTHORIZED UNDER NPDES GENERAL PERMIT ARR150000

The enclosed form may be used to obtain coverage under NPDES general permit ARR150000 for discharges of stormwater associated with large construction activity at any site or common plan of development or sale that will result in the disturbance of five (5) or more acres of total land area.

Return the completed form to:

Arkansas Department of Environmental Quality  
Permit Branch, Water Division  
5301 Northshore Drive  
North Little Rock, AR 72118

Unless notified by the Director to the contrary, dischargers who submit a complete Notice of Intent in accordance with the requirements of this permit are authorized to discharge stormwater from construction sites under the terms and conditions of this permit two weeks after the date the NOI is postmarked.

As required by ADEQ Regulation No. 9, an initial permit fee of \$200.00 must be submitted with this NOI. Subsequent annual fees of \$200.00 per year will be billed by the Department. Failure to remit the required permit fee may be grounds for the Director to deny coverage under this general permit, and to require the owner or operator to apply for an individual NPDES permit.

**NOTE:** A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE PREPARED PRIOR TO SUBMITTAL OF THIS NOI PER PART II.A OF THE GENERAL PERMIT. THE SWPPP MUST BE SUBMITTED FOR REVIEW ALONG WITH THIS NOI FOR LARGE CONSTRUCTION SITES PER PART I.B.6.B OF THE GENERAL PERMIT.

For additional information please contact:

Stormwater Runoff Engineer  
Ph.: (501) 682-0623  
Fax: (501) 682-0880  
website: [www.adeq.state.ar.us](http://www.adeq.state.ar.us)

### INSTRUCTIONS

#### I. How to Determine Latitude and Longitude:

1. If a physical address is known go to [www.terraserver-usa.com](http://www.terraserver-usa.com).
2. Select Advanced Find
3. Select Address
4. Input address
5. Click on Aerial Photo
6. Click on the Info link at the top of the page
7. Note the Latitude and Longitude are in Decimal Coordinates.
8. Go to [www.geology.enr.state.nc.us/gis/latlon.html](http://www.geology.enr.state.nc.us/gis/latlon.html) to convert coordinates to Degrees, Minutes, and Seconds.

NOTE: If a physical address does not exist you may find the coordinates in the Legal Description of the property.

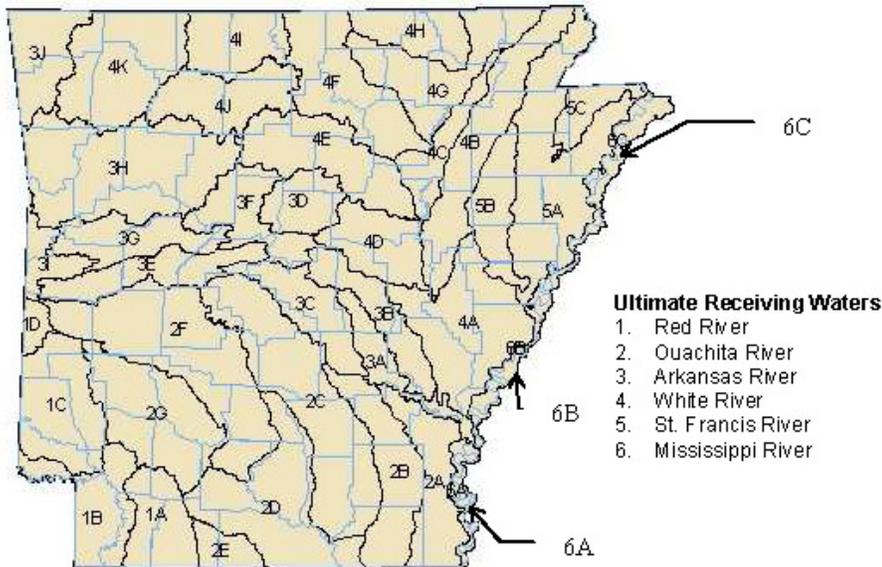
WATER DIVISION  
5301 NORTHSHORE DRIVE / NORTH LITTLE ROCK, ARKANSAS 72118 / PHONE 501-682-0623 / FAX 501-682-0910  
[www.adeq.state.ar.us](http://www.adeq.state.ar.us)  
Large Construction NOI / Revision date 12/2/2008

# 2008 EROSION AND SEDIMENT CONTROL DESIGN AND CONSTRUCTION MANUAL



## II. How to Determine your Ultimate Receiving Waters:

1. Locate the county of your project.
2. Find the numbered segment overlaying the county. For example 2C overlays most of Saline County.
3. Match the number from the segment to the one of the numbered Ultimate Receiving Waters. For example: A project located in Western Saline County is in segment 2C. The "2" determines that the Ultimate Receiving Water for the project is the Ouachita River.



## III. How to determine if the receiving stream is on the approved Arkansas 303(d) List:

1. Go to [www.epa.gov/owow/tmdl](http://www.epa.gov/owow/tmdl)
2. Using the map of the United States, click on Arkansas.
3. Using the "Waters Listed by Waterbody Type" links search for your receiving stream.
4. If your receiving stream is not listed, than your receiving stream is not on the approved Arkansas 303(d) List.
5. If your receiving stream is listed, than click on the links for that receiving stream to determine the pollutants causing the impairment.
6. Once a determination is made that your receiving stream is on the approved Arkansas 303(d) List, than you must determine if the receiving stream has an approved TMDL by using the "Approved TMDLs by Pollutant since January 1, 1996" links toward the bottom of the webpage.

## IV. How to obtain information in regard to Endangered Species:

Contact the U.S. Fish and Wildlife Service at (501) 513-4470 or [www.fws.gov/arkansas-es](http://www.fws.gov/arkansas-es) .

WATER DIVISION  
5301 NORTHSORE DRIVE / NORTH LITTLE ROCK, ARKANSAS 72118 / PHONE 501-682-0623 / FAX 501-682-0910  
[www.adeg.state.ar.us](http://www.adeg.state.ar.us)  
Large Construction NOI / Revision date 12/2/2008

# 2008 EROSION AND SEDIMENT CONTROL DESIGN AND CONSTRUCTION MANUAL

Arkansas Department of Environmental Quality  
Permits Branch, Water Division  
5301 Northshore Drive  
North Little Rock, AR 72118  
(501) 682-0623

---

NOTICE OF INTENT  
FOR DISCHARGERS OF STORMWATER RUNOFF  
ASSOCIATED WITH LARGE CONSTRUCTION ACTIVITY  
AUTHORIZED UNDER NPDES GENERAL PERMIT ARR150000

---

Application Type: New  Renewal  (Permit Tracking Number ARR(\_\_\_\_))

I. PERMITTEE/OPERATOR INFORMATION

Permittee (Legal Name): \_\_\_\_\_ Operator Type:  
Permittee Mailing Address: \_\_\_\_\_  STATE  PARTNERSHIP  
Permittee City: \_\_\_\_\_  FEDERAL  CORPORATION\*  
Permittee State: \_\_\_\_\_ Zip: \_\_\_\_\_  SOLE PROPRIETORSHIP  
Permittee Telephone Number: \_\_\_\_\_  PUBLIC  OTHER  
Permittee Fax Number \_\_\_\_\_  
Permittee E-mail Address \_\_\_\_\_ \*State of Incorporation: \_\_\_\_\_

\* The legal name of the Permittee must be identical to the name listed with the Arkansas Secretary of State.

---

II. INVOICE MAILING INFORMATION

Invoice Contact Person: \_\_\_\_\_ City: \_\_\_\_\_  
Invoice Mailing Company: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Invoice Mailing Address: \_\_\_\_\_ Telephone: \_\_\_\_\_

---

III. FACILITY/PROJECT CONSTRUCTION SITE INFORMATION

1 acre = 43,560 square feet

Project Name: \_\_\_\_\_ Contact Person: \_\_\_\_\_  
Project County: \_\_\_\_\_ Project Physical Address: \_\_\_\_\_  
Directions to the Project: \_\_\_\_\_ Project City: \_\_\_\_\_ Zip: \_\_\_\_\_  
Telephone Number: \_\_\_\_\_  
Project Estimated Start Date: \_\_\_\_\_ Total amount of soil to be disturbed (estimate to nearest 1/2 acre): \_\_\_\_\_  
Project Estimated End Date: \_\_\_\_\_ Total Project Acreage (Estimate to nearest 1/2 acre): \_\_\_\_\_  
Project Latitude: \_\_\_\_\_ degrees \_\_\_\_\_ minutes \_\_\_\_\_ seconds  
Project Longitude: \_\_\_\_\_ degrees \_\_\_\_\_ minutes \_\_\_\_\_ seconds  
Type of Project: Subdivision  School  Other: \_\_\_\_\_  
Is the Project part of a larger common plan of development or sale? Yes  No   
Linear Project Starting Coordinates (if applicable): \_\_\_\_\_ Linear Project Ending Coordinates (if applicable): \_\_\_\_\_  
Latitude: \_\_\_\_° \_\_\_\_' \_\_\_\_" Longitude: \_\_\_\_° \_\_\_\_' \_\_\_\_" Latitude: \_\_\_\_° \_\_\_\_' \_\_\_\_" Longitude: \_\_\_\_° \_\_\_\_' \_\_\_\_"

---

WATER DIVISION  
5301 NORTHSHORE DRIVE / NORTH LITTLE ROCK, ARKANSAS 72118 / PHONE 501-682-0623 / FAX 501-682-0910  
www.adeq.state.ar.us

Large Construction NOI / Revision date 12/2/2008

# 2008 EROSION AND SEDIMENT CONTROL DESIGN AND CONSTRUCTION MANUAL

Arkansas Department of Environmental Quality  
Permits Branch, Water Division  
5301 Northshore Drive  
North Little Rock, AR 72118  
(501) 682-0623

---

## IV. DISCHARGE INFORMATION

Name of Receiving Stream (i.e. an unnamed tributary of Mill Creek, thence into Mill Creek; thence into Arkansas River):  
\_\_\_\_\_

Choose Your Ultimate Receiving Stream: Red River  Ouachita River  Arkansas River   
White River  St. Francis River  Mississippi River

Name of Receiving Municipal Storm Sewer System (If applicable): \_\_\_\_\_

Is the stormwater discharge from the construction site likely to adversely affect a listed endangered or threatened species or its critical habitat? Yes  No

---

## V. FACILITY/SITE PERMIT INFORMATION

NPDES Individual Permit Number (If Applicable): AR00

NPDES General Permit Number (If Applicable): ARG

NPDES General Industrial Stormwater Permit Number (If Applicable): ARR00

NPDES General Construction Stormwater Permit Number (If Applicable): ARR15

---

## VI. OTHER INFORMATION:

Location of SWPPP on the Construction Site: \_\_\_\_\_

Consultant Company: \_\_\_\_\_

Consultant Contact Name: \_\_\_\_\_

Consultant Email Address: \_\_\_\_\_

Consultant Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Consultant Phone Number: \_\_\_\_\_ Consultant Fax Number: \_\_\_\_\_

WATER DIVISION  
5301 NORTHSORE DRIVE / NORTH LITTLE ROCK, ARKANSAS 72118 / PHONE 501-682-0623 / FAX 501-682-0910  
www.adeq.state.ar.us  
Large Construction NOI / Revision date 12/2/2008

# 2008 EROSION AND SEDIMENT CONTROL DESIGN AND CONSTRUCTION MANUAL

Arkansas Department of Environmental Quality  
Permits Branch, Water Division  
5301 Northshore Drive  
North Little Rock, AR 72118  
(501) 682-0623

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## VII. CERTIFICATION OF OPERATOR

\_\_\_\_\_ (Initial) "I certify that, if this facility is a corporation, it is registered with the Secretary of State of Arkansas. Please provide the full name of corporation if different than that listed in Section I above."

\_\_\_\_\_ (Initial) "I certify that as a whole the stormwater discharge(s), and the construction and implementation of Best Management Practices (BMP's) to control stormwater runoff, are not likely to adversely affect species of critical habitat for a listed species."

\_\_\_\_\_ (Initial) "I certify that a stormwater pollution prevention plan has been prepared for this facility in accordance with Part II.A of this permit, which provides for, or will provide for, compliance with local sediment and erosion plans, local stormwater permits or stormwater management plans, in accordance with Part II.A.4.c of this permit."

\_\_\_\_\_ (Initial) "I certify that the cognizant official designated in Part VIII of this Notice of Intent is qualified to act as a duly authorized representative under the provisions of 40 CFR 122.22(b). If no cognizant official has been designated, I understand that the Department will accept reports signed by the applicant"

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Responsible Official Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Responsible Official Signature: \_\_\_\_\_ Date: \_\_\_\_\_

---

## VIII. COGNIZANT OFFICIAL

Cognizant Official Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Cognizant Official Signature: \_\_\_\_\_ Telephone: \_\_\_\_\_

---

## IX. PERMIT REQUIREMENT VERIFICATION

Please check the following to verify completion of permit requirements.

	Yes	No*
Submittal of Complete NOI?	<input type="checkbox"/>	<input type="checkbox"/>
Submittal of Required Permit Fee?	<input type="checkbox"/>	<input type="checkbox"/>
Check Number: _____		
Complete SWPPP?	<input type="checkbox"/>	<input type="checkbox"/>

**\* If you answer No to any of the above questions, then a permit can not be issued!**

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www.adeq.state.ar.us  
Large Construction NOI / Revision date 12/2/2008

**2008 EROSION AND SEDIMENT CONTROL  
DESIGN AND CONSTRUCTION MANUAL**



[Click here and type the date ]

Mr. «Cognizant\_Official\_First\_Name» «Cognizant\_Official\_Last\_Name»  
«Permittee»  
«Mailing\_Address\_PO\_Box\_if\_available»  
«Mailing\_City», «Mailing\_State» «Mailing\_Zip»

RE: NPDES Stormwater Construction General Permit, «Project\_Name», «Site\_City», AR  
Permit Tracking No. «Permit\_Number», AFIN «AFIN»

Dear Mr. «Cognizant\_Official\_Last\_Name»:

The initial permit fee and Notice of Intent (NOI) for coverage under Stormwater Construction General Permit No. ARR150000 were deemed complete on «Date\_NOI\_Received». For tracking purposes, the project has been assigned permit tracking number, «Permit\_Number». Please use this number in all future correspondence related to this construction project.

The Stormwater Pollution Prevention Plan (SWPPP) has been reviewed and all elements required by the SWPPP checklist were included. Please note that review of the SWPPP does not constitute **approval**. The permittee must comply with all the requirements of the NPDES Stormwater Construction General Permit No. ARR150000. Additionally, the permittee may modify the SWPPP as necessary to protect the Waters of the State from erosion and/or sediment runoff.

Please find enclosed for your use: the construction site permit authorization letter, a copy of the general stormwater runoff permit, and a Notice of Termination (NOT).

If you have any questions concerning this matter or need additional information, please feel free to contact «Engineer\_Name», NPDES Stormwater Engineer at (501) 682-«Engineer\_Phone» or myself at (501) 682-0616.

Sincerely,

Mo Shafii  
Assistant Chief, Water Division

MS:«engineer\_initials»

Attachment

Cc: Central Files («Permit\_Number», w/ attachments)  
Patricia Goff, APC&E Commission Secretary  
Water Inspection Branch

# 2008 EROSION AND SEDIMENT CONTROL DESIGN AND CONSTRUCTION MANUAL

Tracking Permit number: «Permit\_Number»  
AFIN: «AFIN»

## AUTHORIZATION LETTER TO DISCHARGE STORMWATER UNDER THE NPDES STORMWATER CONSTRUCTION GENERAL PERMIT NUMBER ARR150000.

### *THIS IS THE NOTICE OF COVERAGE UNDER GENERAL PERMIT ARR150000*

The stormwater discharge shall be in accordance with all monitoring requirements and other conditions set forth in the NPDES stormwater construction general permit number ARR150000.

«Cognizant\_Official\_First\_Name» «Cognizant\_Official\_Last\_Name»  
«Permittee»  
«Mailing\_Address\_PO\_Box\_if\_available»  
«Mailing\_City», «Mailing\_State» «Mailing\_Zip»

is authorized to discharge stormwater from a facility located as follows:

«Project\_Name»,  
«Site\_Address»,  
«Site\_City» in «County\_or\_Counties» County, Arkansas.

In Accordance with the NOI there will be «Total\_Acreage\_to\_be\_Disturbed» acres disturbed out of «Total\_Acreage\_of\_the\_Site» acres total.

The Stormwater Pollution Prevention Plan will be located at *[ please insert the SWPPP location here ]*.

The Project Contact Person for this construction site is «Project\_Contacts\_First\_Name» «Project\_Contacts\_Last\_Name», «Phone\_Number». The Contractor for the construction site is «Comments». *please delete the previous statement if there is no contractor listed.*

This authorization must be **posted** at the construction site in a prominent place per the general permit.

Issued date: «NOI\_Issued»

---

Mo Shafii  
Assistant Chief, Water Division  
Arkansas Department of Environmental Quality

**2008 EROSION AND SEDIMENT CONTROL  
DESIGN AND CONSTRUCTION MANUAL**

Permit No. ARR150000

**SITE WITH AUTOMATIC COVERAGE  
(LESS THAN 5 ACRES)  
CONSTRUCTION SITE NOTICE**

FOR THE  
Arkansas Department of Environmental Quality (ADEQ)  
Storm Water Program  
**NPDES GENERAL PERMIT NO. ARR150000**

The following information is posted in compliance with **Part I.B.8.b** of the ADEQ General Permit Number **ARR150000** for discharges of stormwater runoff from sites with automatic coverage. Additional information regarding the ADEQ stormwater program may be found on the internet at:

*www.adeg.state.ar.us/water/branch\_npdes/stormwater*

Permit Number	ARR150000
Contact Name: Phone Number:	_____ _____
Project Description (Name, Location, etc.): Start Date: End Date: Total Acres:	_____ _____ _____ _____
Location of Stormwater Pollution Prevention Plan:	_____

For Construction Sites Authorized under **Part I.B.6.a** (Automatic Coverage) the following certification must be completed:

I \_\_\_\_\_ (Typed or Printed Name of Person Completing this Certification) certify under penalty of law that I have read and understand the eligibility requirements for claiming an authorization under Part I.B.2. of the ADEQ General Permit Number ARR150000. A stormwater pollution prevention plan has been developed and implemented according to the requirements contained in Part I.B.8.b of the permit. I am aware there are significant penalties for providing false information or for conducted unauthorized discharges, including the possibility of fine and imprisonment for knowing violations.

\_\_\_\_\_  
Signature and Title

\_\_\_\_\_  
Date

# 2008 EROSION AND SEDIMENT CONTROL DESIGN AND CONSTRUCTION MANUAL

Arkansas Department of Environmental Quality  
NPDES Branch, Water Division  
5301 Northshore Drive  
North Little Rock, AR 72118  
(501) 682-0623

---

NOTICE OF TERMINATION (NOT)  
FOR DISCHARGERS OF STORMWATER RUNOFF ASSOCIATED WITH  
CONSTRUCTION ACTIVITY  
AUTHORIZED UNDER NPDES GENERAL PERMIT ARR150000

---

Permit Tracking Number to be Terminated: ARR15 \_\_\_\_\_

## I. PERMITTEE INFORMATION

Permittee Legal Name: \_\_\_\_\_  
Permittee Mailing Address: \_\_\_\_\_  
City: \_\_\_\_\_  
State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Permittee Telephone Number: \_\_\_\_\_  
Permittee Fax Number: \_\_\_\_\_  
Email: \_\_\_\_\_

Permittee Type:  
 STATE       PARTNERSHIP  
 FEDERAL       CORPORATION\*  
 SOLE PROPRIETORSHIP  
 PUBLIC       OTHER

\*State of Incorporation: \_\_\_\_\_

## II. CONSTRUCTION SITE INFORMATION

Project Name: \_\_\_\_\_ Project Contact Person: \_\_\_\_\_  
Project County: \_\_\_\_\_ Project Physical Address: \_\_\_\_\_  
Project City: \_\_\_\_\_ Zip: \_\_\_\_\_  
Telephone Number: \_\_\_\_\_

Have you established vegetation cover with 80% density?       YES       NO  
Have all discharges associated with construction activities been eliminated?       YES       NO  
Have you included pictures of vegetation coverage and stabilized areas?       YES       NO

Please note that photos must be submitted in order to terminate permit coverage.

## III. PERMITTEE CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

"In addition, I understand that by submitting this Notice of Termination that I am no longer authorized to discharge storm water by general permit, and that discharging pollutants in stormwater associated with construction activity to Waters of the State is unlawful under the Clean Water Act and the Arkansas Water and Air Pollution Control Act where the discharge is not authorized by an NPDES permit."

Typed or Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Signature: \_\_\_\_\_ Date: \_\_\_\_\_

WATER DIVISION  
5301 NORTHSHORE DRIVE / NORTH LITTLE ROCK, ARKANSAS 72118 / PHONE 501-682-0623 / FAX 501-682-0880  
www.adeq.state.ar.us  
Construction Stormwater Permit NOT / Revision date 07/10/2008

**2008 EROSION AND SEDIMENT CONTROL  
DESIGN AND CONSTRUCTION MANUAL**

**APPENDIX H**

**MS-4 GENERAL PERMIT**

The Regulated Small Municipal Separate Storm Sewer System (MS4) General Permit authorizes discharge to all receiving waters.

**2008 EROSION AND SEDIMENT CONTROL  
DESIGN AND CONSTRUCTION MANUAL**

**ADEQ**

A R K A N S A S  
Department of Environmental Quality

May 28, 2004

Mr. Robert L. Walters, Chief Engineer  
Arkansas State Highway & Transportation Department  
PO Box 2261  
Little Rock, AR 72203-2261

RE: NPDES Regulated Small MS4 Storm Water Permit, Arkansas State Highway & Transportation Department, Conway, Fayetteville-Springdale, Fort Smith, Hot Springs, Jonesboro, Little Rock, Maumelle, West Memphis, Pine Bluff, Texarkana Urbanized Areas, AR (Permit Tracking No. **ARR040004**)

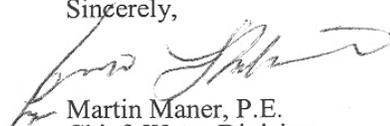
Dear Mr. Walters:

The initial permit fee and Notice of Intent (NOI) for coverage under the Regulated Small Municipal Separate Storm Sewer System (MS4) Storm Water Runoff General Permit (ARR040000) was received on 4/30/2004. The NOI has been reviewed and determined to be complete. Coverage under the general storm water runoff permit (ARR040000) was effective on 5/28/2004. For tracking purposes, the small MS4 has been assigned permit tracking number, **ARR040004**. Please use this number in all future correspondence related to this small MS4.

All reports required by the general storm water runoff permit should be made available for inspection upon request per Part V.G of the general storm water runoff permit. In addition, annual reports should be submitted to the Department in accordance with Part V.H of the general storm water runoff permit.

If you have any questions concerning this matter or need additional information, please feel free to contact the NPDES Storm Water Section at (501) 682-0623.

Sincerely,



Martin Maner, P.E.  
Chief, Water Division

MM:MS:KF

Attachment

Cc: Central Files (ARR040004, w/ attachments)  
James Purvis, ADEQ Administration  
Renee Smith, APC&E Commission Secretary  
Leda Johnson, NPDES Permits  
Frank Esry, Inspection Branch

# Arkansas Department of Environmental Quality

## Regulated Small Municipal Separate Storm Sewer System (MS4) General Permit

### *Arkansas State Highway & Transportation Department*

*Is authorized to discharge to all receiving waters in accordance with the requirements and other conditions of the Regulated Small MS4 General Permit  
ARR040004.*

*This permit is effective on 5/28/2004.*

*This permit and the authorization to discharge shall expire at midnight  
January 31, 2009.*

  
*Martin Maner, P.E. – Chief, Water Division*

**2008 EROSION AND SEDIMENT CONTROL  
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Permit No. ARR040000

**AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE  
ELIMINATION SYSTEM AND THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT**

In accordance with the provisions of the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended, Ark. Code Ann. 8-4-101 et seq.), and the Clean Water Act (33 U.S.C. 1251 et seq.),

**Regulated Small Municipal Separate Storm Sewer Systems (MS4's) Located within the  
State of Arkansas**

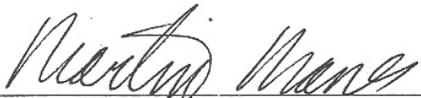
are authorized to discharge, in accordance with the requirements and other conditions set forth in this permit, to all receiving waters except as stated in Part I.D of this permit

Only those operators of regulated MS4's who submit the required Notice of Intent (NOI) and Storm Water Management Plan (SWMP) in accordance with Part III of this permit are authorized to discharge storm water under the provisions of this general permit.

This permit shall become effective on February 1, 2004.

This permit and the authorization to discharge shall expire at midnight, January 31, 2009.

Signed this 31<sup>st</sup> day of December, 2003



Martin Maner, P.E.  
Chief, Water Division  
Arkansas Department of Environmental Quality

**2008 EROSION AND SEDIMENT CONTROL  
DESIGN AND CONSTRUCTION MANUAL**



ARKANSAS  
Department of Environmental Quality

**RESPONSE TO COMMENTS  
FINAL PERMIT DECISION**

This is the response to comments received from various concerned citizens about the draft permit.

Permit No.: ARR040000  
Applicant: General Permit  
Prepared by: Kimberly A. Fuller  
Permit Action : Final permit decision and response to comments received on the draft permit publicly noticed on November 17, 2003.  
Date Prepared: December 30, 2003

The following comments have been received on the draft permit.

**I. Response to issues raised**

**Letter from Carter & Burgess Consultants, Inc. dated December 15, 2003.**

ISSUE #1

Part I, Section B.1.b.i.(C) – Typo – should read “The following municipalities that...”

RESPONSE #1

The staff agrees. The language in the referenced section has been revised as follows.

*The following municipalities meet the designation criteria:*

ISSUE #2

Part I, Section C.1 – this prohibition should be for discharges to the MS4, rather than from the MS4.

## 2008 EROSION AND SEDIMENT CONTROL DESIGN AND CONSTRUCTION MANUAL

### RESPONSE #2

The staff agrees. The language in the referenced section has been revised as follows.

*The permittee must prohibit all non-storm water discharges to their MS4 unless the discharges have been authorized by the ADEQ and the Regulated Small MS4 or as provided in Part I.C.2.*

### ISSUE #3

Part V, Section B.3.a.i – the requirement to “notify the ADEQ of any illicit discharges” is very broad, and would be extremely difficult for an MS4 operator to fulfill, not to mention for the ADEQ to track the submitted information. We would suggest establishing some type of reportable limits, similar to those for hazardous materials. An alternative to this would be to reference the current water quality standards by changing the requirement to read “notify the ADEQ of any illicit discharge that may result in an exceedance of the applicable water quality standards”.

### RESPONSE #3

The staff agrees. The language in the referenced section has been revised as follows.

*... notify the ADEQ of any illicit discharges that may result in an exceedance of an applicable water quality standard;*

### ISSUE #4

Part V, Section B.3.a.v – It might be helpful to specify both “illegal connections” and “illicit discharges” here, rather than “illegal discharges”.

### RESPONSE #4

The staff agrees. The language in the referenced section has been revised as follows.

*...with illegal connections and illicit discharges and improper disposal of waste; and*

### ISSUE #5

Part V, Section B.5.b.iv – should be “pre-construction” rather than “re-construction”.

### RESPONSE #5

The staff agrees. The language has been changed as requested.

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### ISSUE #6

Part V, Section B.5.b.v – It would be helpful to be more specific on how an MS4 operator could achieve this, such as “Provide for a review of the requirements on a regular basis to ensure that the requirements are responsive...” This could also be done as part of their annual report preparation.

### RESPONSE #6

The staff agrees. The language in the referenced section was revised as follows.

*Provide for a review of the requirements on a regular basis to ensure that the requirements are responsive to the constantly changing storm water technologies, developments, and improvements in control technologies.*

### ISSUE #7

Part V, Section B.6.d.i – should read “controls over the permittee’s industrial activities at municipal facilities” rather than “permittee’s construction projects”.

### RESPONSE #7

The staff agrees. The language has been changed as requested.

### ISSUE #8

Part VII, Definitions – It seems unnecessary to include definitions for both “Regulated MS4s” and “Small MS4s”, since they are the same thing under this permit.

### RESPONSE #8

The staff does not agree. The Department feels that it is necessary to define both of the reference terms to delineate the difference between the two concepts.

**Letter from Arkansas State Highway & Transportation Department dated December 10, 2003.**

### ISSUE #9

The AHTD requests that the Arkansas Department of Environmental Quality (ADEQ) allow entities requesting coverage under this rule to set their own permit boundaries so long as they are covering all areas of the MS4 designated as requiring coverage under the regulation. We additionally request that ADEQ allow the AHTD the opportunity to develop a statewide storm water management plan and obtain statewide coverage for its “small” MS4 areas under a single general permit.

## 2008 EROSION AND SEDIMENT CONTROL DESIGN AND CONSTRUCTION MANUAL

### RESPONSE #9

The staff agrees. The AHTD will be allowed to apply for and obtain a single general permit to cover all the AHTD designated small MS4 areas in the state. In addition, one Storm Water Management Plan (SWMP) must also be developed for all of the designated areas in the state.

### ISSUE #10

Can Part I.B.2 be utilized to cover construction activity or industrial activity outside of the *designated* MS4 areas? It would seem logical that an entity should be allowed to cover both of these activities within its entire MS4 system. Please incorporate language that would clarify this issue.

### RESPONSE #10

The staff agrees. The language in the referenced section was revised as follows.

2. *This permit may also authorize an operator of a regulated small MS4 to lawfully discharge storm water in lieu of an otherwise required construction and/or industrial general permit if:*
  - a. *The discharge of storm water is associated with construction activity at the permittee's construction site and is operated by the permittee and located within its permitted area of the designated MS4, consistent with the requirements of Part V.B.4.d, provided the discharges would otherwise be eligible for coverage under ADEQ's current Construction General Permit; and/or*
  - b. *The discharge of storm water is associated with industrial activity at the permittee's facility and is operated by the permittee and located within its permitted area of the designated MS4, consistent with the requirements of Part V.B.6.d, provided the discharges would otherwise be eligible for coverage under ADEQ's current General Industrial Storm Water Permit.*

### ISSUE #11

The permit contains language that is regulatory in nature and may be overly restrictive in a legal sense. These references should be changed to language less restrictive, such as regulate, monitor, police, or report.

Examples are:

- a) Part I.C.1 – “The permittee must *prohibit* all non-storm water discharges...”
- b) Part V.B.3.a.iii – “...*effectively prohibit*, through ordinance...”
- c) Part V.B.4.a.ii – “...the permittee or MS4 operator must, at a minimum, ensure that...”

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Due to the inability of the MS4s to meet this requirement, the AHTD requests that this language be altered to be less restrictive.

### RESPONSE #11

The staff agrees in part. The language in Part V.B.4.a.ii was revised as follows.

- ii. *In lieu of some of the above requirements, the permittee or MS4 operator must, at a minimum, have a procedure in place to require construction sites greater than or equal to one acre located within the MS4 to obtain the proper storm water construction permit coverage from the ADEQ. The requirements contained in Parts V.B.4.a.i.(A).(1), (2), (3), (5), and (6) can potentially be covered by the ADEQ Storm Water Construction General Permit.*

### ISSUE #12

The term municipal is used in the permit when referring to the MS4 entity. These references should be changed since not all MS4s are municipal in nature. Examples are in Part I.B.2.a and b, and Part V.B.6.

### RESPONSE #12

The staff agrees. The referenced sections were changed to state “MS4” instead of “municipal”.

### ISSUE #13

The AHTD recommends a limit be established concerning the minimum size of outfalls that must be mapped under Part V.B.3. It seems reasonable to expect that outfalls under a certain size or serving a small drainage area would not be expected to discharge a significant amount of storm water and would not provide an inordinate amount of pollutants.

### RESPONSE #13

The staff does not agree. The language contained in the referenced section is identical to the language contained in 40 CFR 122.34(b)(3)(ii)(A). Therefore, the ADEQ can not write the general permit to be less stringent than the federal regulation.

### ISSUE #14

Part V.B.6.d.i contains a reference to construction projects. This reference should be to industrial sites.

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RESPONSE #14

The staff agrees. Please see Response #7 above.

ISSUE #15

Part V.B.5.b.iv contains a reference to “re-construction review”. This appears to be incorrect, and should possibly be “pre-construction review”.

RESPONSE #15

The staff agrees. Please see Response #5 above.

ISSUE #16

Part I.B.2.a refers Part V.B.4.f, which does not exist. Should this refer to Part V.B.4.d?

RESPONSE #16

The staff agrees. The cross reference has been corrected.

**Letter from Military Department of Arkansas dated November 19, 2003.**

ISSUE #17

The commenter requested that the designation criteria contained in Part I.B.1.b.ii, Designation Criteria for Hospitals, Universities, and Prisons, be revised to also apply to Military Bases in the state. Therefore, removing the designation criteria contained in Part I.B.1.b.iii.

RESPONSE #17

The staff agrees. The language in Part I.B.1.b.ii was revised as follows and Part I.B.1.b.iii was removed from the permit. It should be noted that 40 CFR 122.26(a)(9)(i)(D) allows the ADEQ the authority to designate any MS4 that “contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States”.

- ii. *Designation Criteria for Hospitals, Universities, **Military Bases**, and Prisons:*
- (A) *Directly discharges to a 303(d) listed Stream with pollutants of concern caused by storm water; or*
  - (B) *Directly discharges to an Arkansas Extraordinary Resource Stream (AERS).*

*The following Hospitals, Universities, Military Bases, or Prisons meet the designation criteria:*

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*None*

**Letter from Department of Army, Pine Bluff Arsenal dated December 15, 2003.**

ISSUE #18

PBA should not be included as a designated military base covered under the permit as noted in Part I.B.1.b.iii. PBA is currently covered under NPDES Storm Water Permit ARR00A048 as an industrial facility and has in place the required Storm Water Pollution Prevention Plan (SWPPP) that addresses storm water across the entire base. Due to the lack of a large resident population (less than 300), PBA is more characteristic of an industrial facility and not an urbanized area. PBA feels that the referenced NPDES Storm Water permit is appropriate.

RESPONSE #18

The staff does not agree. The designation criteria must be the same for all the military bases in the state. The ADEQ can not write designation criteria for each listed military base. Although, based on Response #17 above, the PBA has been removed from designation status.

**Letter from Luanne Diffin dated December 5, 2003.**

ISSUE #19

The commenter made several comments/suggestions throughout the permit which were submitted as a marked up version of the draft permit.

RESPONSE #19

The staff agrees in part. Many revisions were made to the draft permit based on the submitted marked up version of the permit. Please see the enclosed final version of the permit for the specific revisions.

**Letter from Little Rock Air Force Base dated December 15, 2003.**

ISSUE #20

Paragraph C.1, Non-Storm Water Discharges. Add routine building and static aircraft washing to the list of allowable discharges.

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### RESPONSE #20

The staff agrees. The list in the referenced section was revised as follows.

- *Street wash water,*
- *Routine building wash water,*
- *Static aircraft wash water,*
- *Discharges or flows from emergency fire fighting activities, and*

### **ADEQ Revisions.**

In addition to the above described changes, the ADEQ has made the following revisions to the permit.

1. The Notice of Intent (NOI) submittal requirement contained in Parts III.A.1 and III.A.3.a were changed to reflect the “effective” date of the permit versus the “issuance” date. The language was revised as follows.
  1. *MS4s automatically designated under 40 CFR 122.32(a)(1) are required to submit an NOI and a description of the storm water management program or apply for an individual NPDES permit within 90 days from the effective date of the permit.*
  3. *New MS4s and New Operators*
    - a. *For new MS4s within urbanized areas which commence discharges subsequent to the effective date of the permit, the NOI must be submitted prior to commencing discharges.*
2. The Storm Water Management Plan (SWMP) development and implementation deadline contained in Part V.A.1 was changed to reflect the “effective” date of the permit versus the “issuance” date. The language was revised as follows.
  1. *A permittee must fully implement the SWMP, including its measurable goals, no later than five (5) years from the effective date of the permit (except as provided under Part V.A.2.b of this permit).*

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**PART I  
COVERAGE UNDER THIS GENERAL PERMIT**

A. **Permit Area.** This permit covers all areas within the State of Arkansas.

B. **Eligibility.**

1. This permit authorizes the discharge of storm water from small municipal separate storm sewer systems (MS4s) as defined in 40 CFR 122.26(b)(16) and/or Part VII of this permit provided that the permittee complies with all the requirements of this general permit and the MS4:

a. Is located fully or partially (If the small MS4 is not located entirely within an urbanized area, only the portion that is within the urbanized area is regulated.) within an urbanized area as determined by the 2000 Decennial Census, or

b. Is designated for permit authorization by ADEQ pursuant to 40 CFR 122.32.

i. Designation Criteria for Municipalities

(A) Directly discharges to a 303(d) listed Stream with pollutants of concern caused by storm water; or

(B) Directly discharges to an Arkansas Extraordinary Resource Stream (AERS); or

(C) Has had a 50% population growth rate between the 1990 Census and 2000 Census

The following municipalities meet the designation criteria:

City / Town	Discharge to 303(d) stream	Discharge to AERS	Percent Population Change
Conway	No	No	63
Maumelle	No	No	57.2

ii. Designation Criteria for Hospitals, Universities, Military Bases, and Prisons:

(A) Directly discharges to a 303(d) listed Stream with pollutants of concern caused by storm water; or

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(B) Directly discharges to an Arkansas Extraordinary Resource Stream (AERS).

The following Hospitals, Universities, Military Bases, or Prisons meet the designation criteria:

None

2. This permit may also authorize an operator of a regulated small MS4 to lawfully discharge storm water in lieu of an otherwise required construction and/or industrial general permit if:
  - a. The discharge of storm water is associated with construction activity at the permittee's construction site and is operated by the permittee and located within its permitted area of the designated MS4, consistent with the requirements of Part V.B.4.d, provided the discharges would otherwise be eligible for coverage under ADEQ's current Construction General Permit; and/or
  - b. The discharge of storm water is associated with industrial activity at the permittee's facility and is operated by the permittee and located within its permitted area of the designated MS4, consistent with the requirements of Part V.B.6.d, provided the discharges would otherwise be eligible for coverage under ADEQ's current General Industrial Storm Water Permit.

### C. Non-Storm Water Discharges.

1. The permittee must prohibit all non-storm water discharges to their MS4 unless the discharges have been authorized by the ADEQ and the Regulated Small MS4 or as provided in Part I.C.2.
2. The following non-storm water discharges may be discharged unless they are identified as significant contributors of pollutants to or from the MS4. If any of the following discharges are identified as a significant contributor, the permittee must address the discharge as an illicit discharge as specified in Part V.B.3 of this permit:
  - Water line flushing,
  - Landscape irrigation,
  - Diverted stream flows,
  - Rising ground waters,
  - Uncontaminated ground water infiltration,
  - Uncontaminated pumped groundwater,
  - Incidental discharges from potable water sources,
  - Foundation drains,
  - Air conditioning condensate,
  - Irrigation water,
  - Springs,

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- Water from crawl space pumps,
- Footing drains,
- Lawn watering,
- Individual residential car washing,
- Discharges from riparian habitats and wetlands,
- Dechlorinated swimming pool discharges,
- Street wash water,
- Routine building wash water,
- Static aircraft wash water,
- Discharges or flows from emergency fire fighting activities, and
- Other similar occasional incidental non-storm water discharges (e.g. non-commercial or charity car washes, etc.) that are not reasonably expected (based on information available to the Permittee) to be significant sources of pollutants to the Municipal Separate Storm Sewer System, because of either the nature of the discharges or conditions placed on the discharges by the Permittee.

**D. Limitations of Coverage.** This general permit does not authorize:

1. Discharges mixed with sources of non-storm water unless the non-storm water discharges are determined not to be a significant contributor of pollutants as defined in Part VII to waters of the United States;
2. Storm water discharges associated with industrial activity as defined in 40 CFR 122.26(b)(14)(i)-(ix) and (xi), except as allowed under Part I.B.2.b;
3. Storm water discharges associated with construction activity as defined in 40 CFR 122.26(b)(14)(x) or 40 CFR 122.26(b)(15), except as allowed under Part I.B.2.a;
4. Storm water discharges currently covered under an individual or other general NPDES permit;
5. Storm water discharges whose direct, indirect, interrelated, interconnected, or interdependent impacts would jeopardize a listed endangered or threatened species or adversely modify designated critical habitat as defined by the U.S. Fish & Wildlife Services (USF&WS). <http://endangered.fws.gov/>
6. Storm water discharges or implementation of the storm water management plan, which adversely affect properties listed or eligible for listing in the National Register of Historic Places, unless you are in compliance with requirements of the National Historic Preservation Act and have coordinated any necessary activities to avoid or minimize impacts with the appropriate State Historic Preservation Officer.
7. Storm water discharges that will cause or contribute to non-attainment of water quality standards, including failure to protect and maintain existing designated uses of receiving waters. ADEQ may

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require an application for an individual NPDES permit to authorize discharges of storm water from any activity that ADEQ determines to cause or makes a contribution to exceed a water quality standard or that ADEQ determines to cause or contribute to the loss of a designated use of receiving waters.

8. Discharges to waters for which there is an approved Total Maximum Daily Load and/or implementation plan (TMDL/IP) addressing discharges of storm water associated with MS4s, unless the MS4 operator develops and certifies a SWMP that is consistent with the assumptions and allocations in the approved TMDL/IP. To be eligible for coverage under this general permit, operators must incorporate into their SWMP any conditions applicable to their discharges necessary for consistency with the assumptions and allocations of the TMDL/IP within any timeframes established in the TMDL/IP. If a specific numeric waste load allocation has been established that would apply to the project's discharges, the operator must incorporate that allocation into its SWMP and implement necessary steps to meet that allocation. Information regarding existing and proposed TMDLs can be obtained from the Water Quality Section of the ADEQ Water Division at (501) 682-0660 or from the ADEQ website at the following address: [http://www.adeg.state.ar.us/water/branch\\_planning/](http://www.adeg.state.ar.us/water/branch_planning/).
9. Storm water discharges which are prohibited for permitting in 40 CFR 122.4 of the federal regulation.

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**PART II  
AUTHORIZATION UNDER THIS GENERAL PERMIT**

**A. Application for Coverage.**

1. An MS4 operator seeking authorization to discharge under this general permit shall submit to ADEQ a completed Notice of Intent (NOI) form, in accordance with the deadlines listed in Part III.A of this permit. The NOI form, obtained from the ADEQ, includes the information and attachments required in Part III.B of this permit. The NOI must be signed and dated in accordance with Part VI.I of this permit. **An initial permit fee of \$200.00 must accompany the NOI under the provisions of ADEQ Regulation No.9. Subsequent annual fees of \$200.00 per year will be billed by the Department.**
2. If an operator changes after an NOI has been submitted, the new operator shall submit either an Ownership Change Form, a Name Change Form, or a new or revised NOI to ADEQ for review. This permit is not transferable to any person except after notice to the permitting authority. The permitting authority may require modification or revocation and reissuance of the permit to change the name of the operator and incorporate such other requirements as may be necessary under the Act.
3. A discharger, who submits a complete NOI by following the information and attachment inclusions as outlined in Part III.B and meets the eligibility requirements in Part I of this permit, is authorized to discharge storm water from a small MS4 under the terms and conditions of this general permit two weeks after the date the NOI is postmarked. Upon review of the NOI and other available information, the Director may deny coverage under this permit and require submittal of an application for an individual NPDES permit.
4. If ADEQ notifies the MS4 operator of deficiencies or inadequacies in any portion of the NOI (including the Storm Water Management Program), the MS4 operator must correct the deficient or inadequate portions and submit a written statement to ADEQ certifying that appropriate changes have been made. The certification must be submitted within the time-frame specified by ADEQ and must specify how the NOI has been amended to address the identified concerns.

**B. Terminating Coverage.**

1. A permittee may terminate coverage under this general permit by submitting a notice of termination (NOT) to ADEQ within 30 days after the permittee:
  - a. Ceases discharging storm water from the MS4, or
  - b. Ceases operations at the MS4.

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2. The NOT may consist of a letter to ADEQ and must include the following information:
- a. Name, mailing address, and location of the MS4 for which the notification is submitted;
  - b. The name, address, and telephone number of the operator addressed by the NOT;
  - c. The NPDES general permit number for the MS4;
  - d. An indication of whether another operator has assumed responsibility for the MS4, the discharger has ceased operations at the MS4, or the storm water discharges have been eliminated; and
  - e. The following certification:

*I certify under penalty of law that all storm water discharges from the identified MS4 that are authorized by an NPDES general permit have been eliminated, or that I am no longer the operator of the MS4, or that I have ceased operations at the MS4. I understand that by submitting this Notice of Termination I am no longer authorized to discharge storm water under this general permit, and that discharging pollutants in storm water to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by an NPDES permit. I also understand that the submission of this Notice of Termination does not release an operator from liability for any violations of this permit or the Clean Water Act.*

- f. NOT's, signed in accordance with Part VI.I of this permit, must be sent to:

Arkansas Department of Environmental Quality  
P. O. Box 8913  
Little Rock, AR 72219-8913  
Attention: Storm Water Section

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**PART III  
NOTICE OF INTENT REQUIREMENTS**

**A. Deadlines for Notification**

1. MS4s automatically designated under 40 CFR 122.32(a)(1) are required to submit an NOI and a description of the storm water management program or apply for an individual NPDES permit within 90 days from the effective date of the permit.
2. MS4s designated under 40 CFR 122.26(a)(9)(i)(C) or (D), are required to submit an NOI and a description of the storm water management program within 180 days of notice of designation, unless the notice of designation grants a later date.
3. New MS4s and New Operators
  - a. For new MS4s within urbanized areas which commence discharges subsequent to the effective date of the permit, the NOI must be submitted prior to commencing discharges.
  - b. For new operators of an existing MS4, the NOI must be submitted prior to taking operational control of the MS4.
4. *Submitting a Late NOI.* MS4 operators are not prohibited from submitting an NOI after the dates provided in Parts III.A.1, Part III.A.2, or Part III.A.3. If a late NOI is submitted, the authorization is only for discharges that occur after permit coverage is effective. The permitting authority reserves the right to take appropriate enforcement actions for any un-permitted discharges.

**B. Contents of Notice of Intent.** An MS4 operator eligible for coverage under this general permit shall submit an NOI to discharge under this general permit. The NOI shall contain the following information:

1. The name, mailing address, and telephone number of the municipal entity applying;
2. An indication of whether the MS4 operator is a Federal, State, County, Municipality, or other public entity;
3. The urbanized area or core municipality (if not located in an urbanized area) where the small MS4 is located; the county(ies) where the small MS4 is located, and the latitude and longitude of the approximate center of the small MS4;
4. The name and work position or title of the contact person;
5. The name of the major receiving water(s) and an indication of whether any of the receiving waters are on the latest CWA section 303(d) list of impaired waters or have an approved TMDL. If the

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small MS4 discharges to any waters for which a TMDL applicable to discharges from the MS4 has been approved, indicate that the SWMP meets the requirements of Part I.D.8;

6. If the MS4 operator is relying on another governmental entity to satisfy one or more permit obligations (see Part V.D), the identity of that entity(ies) and the element(s) the entity(ies) will be implementing;
7. An indication of whether the MS4 operator intends to cover discharges associated with municipal industrial activity and/or municipal construction activity under this permit.
8. A description of the Storm Water Management Program (SWMP), including Best Management Practices (BMPs) that will be implemented and the measurable goals for each of the storm water minimum control measures specified in Part V.B of this permit, the month and year in which the MS4 operator will start and fully implement each of the minimum control measures or the frequency of the action, the name of the person(s) responsible for implementing or coordinating the SWMP, and the supporting documentation required by Part I.D.5 and Part I.D.6.
9. The signature of the certifying official, signed in accordance with the signatory requirements of Part VI.I.

C. **Where to Submit.** The MS4 operator shall submit the signed NOI to ADEQ at the following address:

Arkansas Department of Environmental Quality  
P. O. Box 8913  
Little Rock, AR 72219-8913  
Attention: Storm Water Section

D. **Co-Permittees Under a Joint SWMP.** Any small MS4 that meets the requirements of Part I of this general permit may choose to partner with another regulated MS4 to develop and implement a SWMP. The partnering MS4s must submit separate NOIs, but need only prepare one joint SWMP. If responsibilities are being shared as provided in Part V.D of this permit, the SWMP must describe which permittees are responsible for implementing each of the minimum measures. All small MS4 permittees are subject to the provisions in Part V.E.

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**PART IV  
SPECIAL CONDITIONS**

- A. **Compliance with Water Quality Standards.** Where a discharge is already authorized under this general permit and is later determined to cause or contribute to the violation of an applicable water quality standard, ADEQ will notify the permittee. The permittee must take all necessary actions to ensure that future discharges do not cause or contribute to an exceedance of a surface water quality standard and shall document these actions in the SWMP. If an exceedance remains or re-occurs, the coverage under this general permit may be terminated by ADEQ, and ADEQ may require an application for coverage under an individual permit. Compliance with this requirement does not preclude any enforcement activity for the underlying violation.
- B. **Total Maximum Daily Loads (TMDLs) Allocations Established after Permit Issuance.** If a TMDL is established for any waterbody into which the permittee discharges prior to the date that the permittee or MS4 operator submits an NOI, and if that TMDL includes a wasteload allocation or load allocation for a parameter likely to be discharged by the MS4, the permittee must meet the requirements of the TMDL and/or its associated implementation plan within any timeframes established in the TMDL. If a TMDL is approved for any waterbody into which the permittee discharges after the date that the permittee or MS4 operator submits an NOI, ADEQ may require revisions to the SWMP to ensure that the wasteload allocation, load allocation and/or the TMDL's associated implementation plan will be met within any timeframes established in the TMDL. Monitoring of the discharges may also be required, as appropriate, to ensure compliance with the TMDL. Information regarding existing and proposed TMDLs can be obtained from the Water Quality Section of the ADEQ Water Division at (501) 682-0660 or from the ADEQ website at the following address: [http://www.adeq.state.ar.us/water/branch\\_planning/](http://www.adeq.state.ar.us/water/branch_planning/).

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**PART V  
STORM WATER MANAGEMENT PROGRAM (SWMP)**

- A. **General Requirements.** An MS4 operator shall develop, implement, and evaluate a SWMP designed to meet the appropriate surface water quality standards. The SWMP shall include the best management practices (BMPs) and other provisions ADEQ determines appropriate for the control of pollutants.
1. A permittee must fully implement the SWMP, including its measurable goals, no later than five (5) years from the effective date of the permit (except as provided under Part V.A.2.b of this permit).
  2. The SWMP shall address each of the minimum control measures of Part V.B. The SWMP must provide:
    - a. BMPs that ensure that the discharges do not cause or contribute to an exceedance of an applicable numeric or narrative water quality standard; and
    - b. Measurable goals, including interim milestones, for each BMP, including as appropriate, the months and years in which the MS4 will undertake the required actions and the frequency of the action. Program development and implementation schedules under this paragraph must provide for full implementation of a complete SWMP no later than five years from the effective date of the permit. Credible interim progress in developing and implementing program elements must be made over the five year term of the permit.
- B. **Minimum Control Measures.** (Guidance on Minimum Measures, Measurable Goals, and BMPs are available via <http://www.epa.gov/earth1r6/6wq/npdes/sw/ms4/>)
1. ***Public Education and Outreach on Storm Water Impacts.***
    - a. The permittee or MS4 operator, as applicable, must:
      - i. Implement a public education program to distribute educational materials (i.e., flyers placed in the Municipal water bill envelope) to the community or conduct equivalent outreach activities about the impact of storm water discharges on waterbodies and the steps that the public can take to reduce pollutants in storm water runoff.;
    - b. The permittee or MS4 operator, as applicable, may use the following *recommendations* in the development of the SWMP:
      - i. Use storm water educational materials locally developed or provided by:
        - (A) The EPA:

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- (B) ADEQ;
  - (C) Environmental, public interest, or trade organizations; and/or
  - (D) Other MS4s.
- ii. Inform individuals and households about the steps they can take to reduce storm water pollution, such as ensuring proper septic system maintenance, ensuring the proper use and disposal of landscape and garden chemicals including fertilizers and pesticides, protecting and restoring riparian vegetation, and properly disposing of used motor oil or household hazardous wastes;
  - iii. Inform individuals and groups how to become involved in local stream restoration activities as well as activities that are coordinated by youth service and conservation corps or other citizen groups;
  - iv. Tailor your program, using a mix of locally appropriate strategies, to target specific audiences and communities. You should target some of the materials or outreach programs to be directed toward targeted groups of commercial, industrial, and institutional entities likely to have significant storm water impacts. For example, providing information to restaurants on the impact of grease clogging storm drains and to garages on the impact of oil discharges;
  - v. Tailor your outreach program to address the viewpoints and concerns of all communities, particularly minority and disadvantaged communities, as well as any special concerns relating to children.

The permittee or MS4 operator must define appropriate BMPs for this minimum control measure and measurable goals for each BMP.

***ic Involvement/Participation.***

The permittee or MS4 operator, as applicable, must:

- i. Comply with State and local public notice requirements when implementing a public involvement/participation program.

The permittee or MS4 operator, as applicable, may use the following *recommendations* in the development of the SWMP:

- i. Include the public in developing, implementing, and reviewing your storm water management program and make efforts to reach out and engage all economic and ethnic groups. Opportunities for members of the public to participate in program

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development and implementation include serving as citizen representatives on a local storm water management panel, attending public hearings, working as citizen volunteers to educate other individuals about the program, assisting in program coordination with other pre-existing programs, or participating in volunteer monitoring efforts. (Citizens should obtain approval where necessary for lawful access to monitoring sites.)

- c. The permittee or MS4 operator must define appropriate BMPs for this minimum control measure and measurable goals for each BMP.

### 3. *Illicit Discharge Detection and Elimination.*

- a. The permittee or MS4 operator, as applicable, must:
  - i. Develop, implement and enforce a program to detect and eliminate illicit discharges into the small MS4 and notify the ADEQ of any illicit discharges that may result in an exceedance of an applicable water quality standard;
  - ii. Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls;
  - iii. To the extent allowable under State or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into the storm sewer system and implement appropriate enforcement procedures and actions;
  - iv. Develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to the system;
  - v. Inform public employees, businesses, and the general public of hazards associated with illegal connections and illicit discharges and improper disposal of waste; and
  - vi. Address the following categories of non-storm water discharges or flows (i.e., illicit discharges) only if you identify them as significant contributors of pollutants to your small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water (discharges or flows from emergency fire fighting activities are excluded from the effective prohibition against non-storm

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water and need only be addressed where they are identified as significant sources of pollutants to waters of the United States).

(A) The permittee may also develop a list of other similar occasional incidental non-storm water discharges (e.g., non-commercial or charity car washes, etc.) that will not be addressed as illicit discharges. These non-storm water discharges must not be reasonably expected (based on information available to the permittees) to be significant sources of pollutants to the MS4, because of either the nature of the discharges or conditions the permittee has established for allowing these discharges to the MS4 (e.g., a charity car wash with appropriate controls on frequency, proximity to sensitive waterbodies, BMPs on the wash water, etc.). The permittee must document in the SWMP any local controls or conditions placed on the discharges, and include a provision prohibiting any individual non-storm water discharge that is determined to be contributing significant amounts of pollutants to the MS4.

b. The permittee or MS4 operator, as applicable, may use the following *recommendations* in the development of the SWMP:

i. Ensure that the plan to detect and address illicit discharges, includes the following four components:

(A) Procedures for locating priority areas likely to have illicit discharges;

(B) Procedures for tracing the source of an illicit discharge;

(C) Procedures for removing the source of the discharge; and

(D) Procedures for program evaluation and assessment.

ii. Conduct visual screening of the outfalls during dry weather and conduct field tests of selected pollutants as part of the procedures for locating priority areas.

c. The permittee or MS4 operator must define appropriate BMPs for this minimum control measure and measurable goals for each BMP.

4. ***Construction Site Storm Water Runoff Control.***

a. The permittee or MS4 operator, as applicable, must address the storm water runoff from construction sites by one of the following methods:

i. Develop and implement a program to reduce pollutants in any storm water runoff to the small MS4 from construction activities that result in a land disturbance of greater

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than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. The extent to which the program will rely upon the NPDES Phase II Construction regulation should be specified.

(A) The program must include the development and implementation of, at a minimum:

- (1) An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State or local law;
- (2) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices;
- (3) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
- (4) Procedures for site plan review which incorporate consideration of potential water quality impacts;
- (5) Procedures for receipt and consideration of information submitted by the public; and
- (6) Procedures for site inspection and enforcement of control measures.

ii. In lieu of some of the above requirements, the permittee or MS4 operator must, at a minimum, have a procedure in place to require construction sites greater than or equal to one acre located within the MS4 to obtain the proper storm water construction permit coverage from the ADEQ. The requirements contained in Parts V.B.4.a.i.(A).(1), (2), (3), (5), and (6) can potentially be covered by the ADEQ Storm Water Construction General Permit.

b. The permittee or MS4 operator, as applicable, may use the following *recommendations* in the development of the SWMP:

i. Before any building permit is issued for a lot or site of one acre or more, the developer or contractor must submit a storm water management plan. Compliance with this storm water management plan will be checked each time the Building Inspector visits the site.

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- ii. Include sanctions to ensure compliance: examples include non-monetary penalties, fines, bonding requirements and/or permit denials for non-compliance;
  - iii. Include procedures for site plan review including the review of individual pre-construction site plans to ensure consistency with local sediment and erosion control requirements;
  - iv. Include procedures for site inspections and enforcement of control measures including steps to identify priority sites for inspection and enforcement based on the nature of the construction activity, topography, and the characteristics of soils and receiving water quality; and
  - v. Provide educational and training measures for construction site operators, including requiring implementing a storm water pollution prevention plan (SWPPP) at construction sites within your jurisdiction that discharge into your system.
- c. The permittee or MS4 operator must define appropriate BMPs for this minimum control measure and measurable goals for each BMP.
- d. *Optional Coverage for the MS4 Operator's Discharges Associated with MS4 Construction Activity:* MS4 operators covering discharges of storm water associated with construction activity under this permit must:
- i. Adopt in the initial Construction Site Storm Water Runoff Control program submitted with the NOI controls over the permittee's construction projects equivalent to controls required by the current ADEQ Construction General Permit for the area(s) the MS4 is located.
  - ii. Ensure all construction projects being covered meet all eligibility requirements of the Construction General Permit, other than those related to submission of NOIs.
  - iii. Prepare and implement a storm water pollution prevention plan consistent with the Construction General Permit for each municipal construction project covered under this permit. This plan may be a "universal" or "standard" plan applied to all municipal construction projects or a group of similar construction projects.
  - iv. Maintain a record of the location, acres disturbed, and dates construction activities commenced and ended of all construction projects covered under this permit. This summary of coverage information must be included in the Annual Report required under Part V.H.

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### 5. *Post-Construction Storm Water Management in New Development and Redevelopment.*

- a. The permittee or MS4 operator, as applicable, must:
  - i. Develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into your small MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts;
  - ii. Develop and implement strategies which include a combination of structural and/or non-structural best management practices (BMPs) appropriate for your community;
  - iii. Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State or local law; and
  - iv. Ensure adequate long-term operation and maintenance of BMPs.
- b. The permittee or MS4 operator, as applicable, may use the following *recommendations* in the development of the SWMP:
  - i. Ensure that the BMPs chosen are appropriate for the local community; minimize water quality impacts; and attempt to maintain pre-development runoff conditions;
  - ii. In choosing appropriate BMPs, participate in locally-based watershed planning efforts which attempt to involve a diverse group of stakeholders including interested citizens. When developing a program that is consistent with this measure's intent, ADEQ recommends that you adopt a planning process that identifies the municipality's program goals (e.g., minimize water quality impacts resulting from post-construction runoff from new development and redevelopment), implementation strategies (e.g., adopt a combination of structural and/or non-structural BMPs), operation and maintenance policies and procedures, and enforcement procedures;
  - iii. In developing the program, consider assessing existing ordinances, policies, programs and studies that address storm water runoff quality. In addition to assessing these existing documents and programs, you should provide opportunities to the public to participate in the development of the program;
  - iv. Ensure the appropriate implementation of the structural BMPs by considering some or all of the following: pre-construction review of BMP designs; inspections during construction to verify BMPs are built as designed; post-construction inspection and

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maintenance of BMPs; and penalty provisions for the noncompliance with design, construction/operation, and maintenance; and

- v. Provide for a review of the requirements on a regular basis to ensure that the requirements are responsive to the constantly changing storm water technologies, developments, and improvements in control technologies.

- c. The permittee or MS4 operator must define appropriate BMPs for this minimum control measure and measurable goals for each BMP.

6. ***Pollution Prevention/Good Housekeeping for Municipal Operations.***

- a. The permittee or MS4 operator, as applicable, must:

- i. Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from MS4 operations; and
- ii. Using training materials that are available from EPA, ADEQ, or other organizations, the program must include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction or land disturbances, and storm water system maintenance.

- b. The permittee or MS4 operator, as applicable, may use the following *recommendations* in the development of the SWMP:

- i. Maintenance activities, maintenance schedules, and long-term inspection procedures for structural and non-structural storm water controls to reduce floatables and other pollutants discharged from the separate storm sewers;
- ii. Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, salt/sand storage locations and snow disposal areas operated by you, and waste transfer stations;
- iii. Procedures for properly disposing of waste removed from the separate storm sewers and areas listed above (such as dredge spoil, accumulated sediments, floatables, and other debris);
- iv. Ways to ensure that new flood management projects assess the impacts on water quality and examine existing projects for incorporating additional water quality protection devices or practices; and

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- v. Include operation and maintenance as an integral component of all storm water management programs. This measure is intended to improve the efficiency of these programs and require new programs where necessary.
- c. The permittee or MS4 operator must define appropriate BMPs for this minimum control measure and measurable goals for each BMP.
- d. *Optional Coverage for the MS4 Operator's Discharges Associated with MS4 Industrial Activity:* MS4 operators covering discharges of storm water associated with industrial activity under this permit must:
  - i. Adopt in the initial Pollution Prevention/Good Housekeeping for Municipal Operations program submitted with the NOI controls over the permittee's industrial activities at municipal facilities equivalent to controls required by the current ADEQ's General Industrial Storm Water Permit for the area(s) the MS4 is located.
  - ii. Ensure all facilities being covered meet all eligibility requirements of the General Industrial Storm Water Permit, other than those related to submission of NOIs.
  - iii. Prepare and implement a storm water pollution prevention plan consistent with the General Industrial Storm Water Permit for each municipal facility with storm water discharges associated with industrial activity covered under this permit. This plan may be a "universal" or "standard" plan applied to all facilities or a group of similar facilities.
  - iv. Maintain a record of the location and industrial activity of all facilities with discharges of storm water associated with industrial activity covered under this permit. This summary of coverage information must be included in the Annual Report required under Part V.H.

### **C. Qualifying State or Local Program.**

- 1. The permittee or MS4 operator may follow any qualifying program instead of the relevant requirements in Part V.B above.

### **D. Sharing Responsibility.** Implementation of one or more of the minimum measures may be shared with another entity, or the entity may fully take over the measure. (For example, the State program implementing Phase II Storm Water requirements for Small Construction sites (down to one acre) will largely meet the conditions of Part V.B.4 above.) A permittee may rely on another entity only if:

- 1. The other entity, in fact, implements the control measure;

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2. The control measure, or component of that measure, is at least as stringent as the corresponding permit requirement; and
3. The other entity agrees to implement the control measure on the permittee's behalf. Written acceptance of this obligation is expected. The permittee shall maintain this obligation as part of the SWMP description. If the other entity agrees to report on the minimum measure, the permittee shall supply the other entity with the reporting requirements in Part V.H of this general permit. The permittee remains responsible for compliance with the permit obligations if the other entity fails to implement the control measure component.

**E. Reviewing and Updating SWMPs.**

1. The permittee shall annually review the SWMP in conjunction with preparation of the annual report required under Part V.H.
2. The permittee may change the SWMP during the life of the permit according to the following procedures:
  - a. Changes adding (but not subtracting or replacing) components, controls, or requirements to the SWMP may be made at any time upon written notification to ADEQ;
  - b. Changes replacing an ineffective or infeasible management practice specifically identified in the SWMP with an alternate management practice may be requested at any time. Unless denied by ADEQ, changes proposed according to the criteria below are deemed approved and may be implemented 60 days after submitting the request. If the request is denied, ADEQ will send a written response giving a reason for the decision. Modification requests must include:
    - i. An analysis of why the management practice is ineffective or infeasible (including cost prohibitive),
    - ii. Expectations on the effectiveness of the replacement management practice, and
    - iii. An analysis of why the replacement management practice is expected to achieve the goals of the management practice to be replaced;
  - c. Change requests or notifications must be made in writing and signed in accordance with Part VI.I.
3. ADEQ may notify a permittee that changes to the SWMP are necessary:
  - a. To address impacts on receiving water quality caused, or contributed to, by discharges from the MS4;

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- b. To include more stringent requirements necessary to comply with new federal or state statutory or regulatory requirements;
  - c. To include other conditions deemed necessary by ADEQ to comply with the surface water quality standards, ESA related requirements, and/or other goals and requirements of the CWA, or
  - d. If, at any time, ADEQ determines that the SWMP does not meet permit requirements.
4. Within 90 days of receipt of notification as described in Part V.E.3 above, the permittee must make the required changes to the SWMP and submit to ADEQ a written statement certifying that the requested changes have been made. ADEQ will request changes in writing; and offer an opportunity to propose alternative program changes to meet the objective of the requested modification.
5. *Transfer of Ownership, Operational Authority, or Responsibility for SWMP Implementation.* The permittee must implement the SWMP on all new areas added to the permittee's portion of the MS4 (or for which the permittee becomes responsible for implementation of storm water quality controls) as expeditiously as practicable, but not later than one (1) year from addition of the new areas. Implementation may be accomplished in a phased manner to allow additional time for controls that cannot be implemented immediately.
- a. Within 90 days of a transfer of ownership, operational authority, or responsibility for SWMP implementation, the permittee must have a plan for implementing the SWMP on all affected areas. The plan may include schedules for implementation. Information on all new annexed areas and any resulting updates required to the SWMP must be included in the annual report.
  - b. Only those portions of the SWMP specifically required as permit conditions shall be subject to the modification requirements of 40 CFR 124.5. Addition of components, controls, or requirements by the permittee(s) and replacement of an ineffective or infeasible BMP implementing a required component of the SWMP with an alternate BMP expected to achieve the goals of the original BMP shall be considered minor changes to the SWMP and not modifications to the permit.

### F. Monitoring.

1. The permittee must evaluate program compliance, the appropriateness of identified best management practices, and progress toward achieving identified measurable goals. If the permittee discharges to waters for which a TMDL and implementation plan has been established, the permittee must monitor to determine if the storm water controls are adequate to maintain compliance with the MS4's wasteload allocation.

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2. If the permittee conducts monitoring per the TMDL and implementation plan requirements at the permitted small MS4, the permittee must comply with the following:
  - a. *Representative monitoring.* Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
  - b. *Test Procedures.* Monitoring results must be conducted according to test procedures approved under 40 CFR Part 136.
  - c. *Discharge Monitoring Report.* Monitoring results must be reported on a Discharge Monitoring Report (DMR) form and submitted in accordance with the TMDL and implementation plan requirements.
3. Records of monitoring information shall include:
  - a. The date, exact place, and time of sampling or measurements;
  - b. The names(s) of the individual(s) who performed the sampling or measurements;
  - c. The date(s) analyses were performed;
  - d. The names of the individuals who performed the analyses;
  - e. The analytical techniques or methods used; and
  - f. The results of such analyses.

**G. Recordkeeping.**

1. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart or other recordings for continuous monitoring instrumentation, copies of all reports required by this permit, copies of Discharge Monitoring Reports (DMRs), a copy of the NPDES permit, and records of all data used to complete the application (NOI) for this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application, or for the term of this permit, whichever is longer. This period may be extended by request of the permitting authority at any time.
2. The permittee shall submit any records to the permitting authority upon request. The permittee must retain a description of the SWMP required by this permit (including a copy of the permit language) at a location accessible to the permitting authority. The permittee must make all records, including the notice of intent (NOI) and the description of the SWMP, available to the public if requested in writing.

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3. Records of monitoring information shall include:
  - a. The date, exact place, and time of sampling or measurements;
  - b. The names(s) of the individual(s) who performed the sampling or measurements;
  - c. The date(s) analyses were performed;
  - d. The names of the individuals who performed the analyses;
  - e. The analytical techniques or methods used; and
  - f. The results of such analyses.

**G. Recordkeeping.**

1. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart or other recordings for continuous monitoring instrumentation, copies of all reports required by this permit, copies of Discharge Monitoring Reports (DMRs), a copy of the NPDES permit, and records of all data used to complete the application (NOI) for this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application, or for the term of this permit, whichever is longer. This period may be extended by request of the permitting authority at any time.
  
2. The permittee shall submit any records to the permitting authority upon request. The permittee must retain a description of the SWMP required by this permit (including a copy of the permit language) at a location accessible to the permitting authority. The permittee must make all records, including the notice of intent (NOI) and the description of the SWMP, available to the public if requested in writing.

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**H. Reporting.**

1. The permittee must submit annual reports to ADEQ for each year of the permit term. The first report is due fifteen (15) months from the effective date of the permit, covering the activities of the permittee during the twelve (12) month period beginning on the effective date of the permit for the permittee. Subsequent annual reports are due on the same date for each of the following years during the remainder of the permit term (and continuing into any administrative continuance of the permit, should it not be reissued prior to expiration). The report must include:
  - a. The status of compliance with permit conditions, an assessment of the appropriateness of the identified best management practices, and the progress towards achieving the measurable goals for each of the minimum control measures;
  - b. Results of information collected and analyzed, if any, during the reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the maximum extent practicable;
  - c. A summary of the storm water activities the permittee plans to undertake during the next reporting cycle (including an implementation schedule);
  - d. Proposed changes to the storm water management program, including changes to any BMPs or any identified measurable goals that apply to the program elements;
  - e. Description and schedule for implementation of additional BMPs that may be necessary, based on monitoring results, to ensure compliance with applicable TMDLs and implementation plans; and
  - f. Notice that the permittee is relying on another government entity to satisfy some of the permit obligations (if applicable).
2. Where to Submit. Annual reports shall be submitted to ADEQ at the following address:

Arkansas Department of Environmental Quality  
P. O. Box 8913  
Little Rock, AR 72219-8913  
Attention: Storm Water Section

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**PART VI  
STANDARD PERMIT CONDITIONS**

- A. **Duty to Comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of CWA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
- B. **Penalties for Violations of Permit Conditions.** The Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended) provides that any person who violates any provisions of a permit issued under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year, or a fine of not more than twenty five thousand dollars (\$25,000) or by both such fine and imprisonment for each day of such violation. Any person who violates any provision of a permit issued under the Act may also be subject to civil penalty in such amount as the court shall find appropriate, not to exceed ten thousand dollars (\$10,000) for each day of such violation. The fact that any such violation may constitute a misdemeanor shall not be a bar to the maintenance of such civil action.
- C. **Duty to Reapply.** Upon re-issuance of a new general permit, the permittee must notify the Director of the intent to be covered by the new general permit in the following manner.
1. Submit a Notice of Intent (NOI) consistent with the new general permit requirements no later than 90 days following the effective date of the new general permit.
- D. **Continuation of the Expired General Permit.** An expired general permit continues in force and effect until a new general permit is issued. If this permit is not re-issued or replaced prior to the expiration date, it will be administratively continued in accordance with the Administrative Procedure Act and remain in force and effect. If you were granted permit coverage prior to the expiration date, you will automatically remain covered by the continued permit until the earliest of:
1. Re-issuance or replacement of this permit, at which time you must comply with the conditions of the new permit and NOI to maintain authorization to discharge; or
  2. Your submittal of a Notice of Termination; or
  3. Issuance of an individual permit for the project's discharges; or
  4. A formal permit decision by the ADEQ to not re-issue this general permit, at which time you must seek coverage under an individual permit.
- E. **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for the 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.

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- F. Duty to Mitigate.** The permittee must take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.
- G. Duty to Provide Information.** The permittee must furnish to the permitting authority any information that is requested to determine compliance with this permit or other information.
- H. Other Information.** If the permittee becomes aware that the permittee has failed to submit any relevant facts in the Notice of Intent or submitted incorrect information in the Notice of Intent or in any other report to the permitting authority, the permittee must promptly submit such facts or information.
- I. Signatory Requirements.** All Notices of Intent, Notices of Termination, reports, certifications, or information submitted to the permitting authority, or that this permit requires be maintained by the permittee shall be signed and certified as follows:
1. All Notices of Intent must be signed and certified as follows:
    - a. For a corporation: By a responsible corporate officer. For the purpose of this Part, a responsible corporate officer means:
      - i. A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or
      - ii. The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
    - b. For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or
    - c. For a Municipality, County, State, Federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this Part, a principal executive officer of a Federal agency includes
      - i. The chief executive officer of the agency, or

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- ii. A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA).
2. All NOT's, SWMP's, reports, certifications, or other information required by this permit must be signed by a person described in Part VI.I.1 above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described in Part VI.I;
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
  - c. The signed and dated written authorization is included in the SWMP. A copy must be submitted to ADEQ, if requested.
3. Changes to Authorization. If an authorization is no longer accurate because a different operator has the responsibility for the overall operation of the MS4, a new authorization satisfying the requirement of Part VI.I.2 above must be completed prior to or together with any reports, information, or notices of intent to be signed by an authorized representative.
4. Any person signing documents under the terms of this permit shall make the following certification:

*"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."*
- J. Penalties for Falsification of Reports. The Arkansas Water and Air Pollution Control Act provides that any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained under this permit shall be subject to civil penalties specified in Part VI.B of this permit and/or criminal penalties under the authority of the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended).
- K. Penalties for Tampering. The Arkansas Water and Air Pollution Control act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to

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imprisonment for not more than one (1) year or a fine of not more than twenty five thousand dollars (\$25,000) or by both such fine and imprisonment.

- L. Property Rights.** The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.
- M. Proper Operation and Maintenance.** The permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used to achieve compliance with the conditions of this permit and with the conditions of the permittee's storm water management program. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed only when the operation is necessary to achieve compliance with the conditions of the permit.
- N. Inspection and Entry.** The permittee must allow the permitting authority or an authorized representative (including an authorized contractor acting as a representative of the Administrator) upon the presentation of credentials and other documents as may be required by law, to do any of the following:
1. Enter the premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
  2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit;
  3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment) practices, or operations regulated or required under this permit; and
  4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location.
- O. Permit Actions.** This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- P. Permit Transfers.** This permit is not transferable to any person except after notice (Ownership Change Form) to the permitting authority. The permitting authority may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Act.
- Q. Anticipated Noncompliance.** The permittee must give advance notice to the permitting authority of any planned changes in the permitted small MS4 or activity which may result in noncompliance with this permit.

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- R. State Environmental Laws.** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by section 510 of the Act.
1. No condition of this permit releases the permittee from any responsibility or requirements under other environmental statutes or regulations.
- S. Severability.** The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.
- T. Procedures for Modification or Revocation.** Permit modification or revocation will be conducted according to 40 CFR 122.62, 122.63, 122.64 and 124.5.
- U. Requiring an Individual NPDES Permit.**
1. *Request by permitting authority.* The permitting authority may require any person seeking authority under, or authorized by, this permit to apply for and/or obtain either an individual NPDES permit or an alternative NPDES general permit. Any interested person may petition the permitting authority to take action under this paragraph. Where the permitting authority requires the permittee to apply for an individual NPDES permit, the permitting authority will notify the permittee in writing that a permit application is required. This notification shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the permittee to file the application, and a statement that on the effective date of issuance or denial of the individual NPDES permit or the alternative general permit as it applies to the individual permittee, coverage under this general permit shall automatically terminate. Applications must be submitted to ADEQ. The permitting authority may grant additional time to submit the application upon request of the MS4 operator. If the permittee fails to submit in a timely manner an individual NPDES permit application as required by the permitting authority under this paragraph, then the applicability of this permit to the permittee is automatically terminated at the end of the day specified by the permitting authority for application submittal. This paragraph does not apply to any person whom the permitting authority determines was never eligible under Part I.D. The permitting authority may also notify a discharger to file for an individual permit prior to submission of an NOI.
  2. *Request by permittee.* Any discharger authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual NPDES permit. In such cases, the permittee must submit an individual application in accordance with the requirements of 40 CFR 122.33(b)(2), with reasons supporting the request, to ADEQ. The request may be granted by issuance of any individual permit or an alternative general permit if the reasons cited by the permittee are adequate to support the request.
  3. *General permit termination.* When an individual NPDES permit is issued to a discharger otherwise subject to this permit, or the permittee is authorized to discharge under an alternative NPDES general

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permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit, whichever the case may be. When an individual NPDES permit is denied to an operator otherwise subject to this permit or the operator is denied for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the date of such denial, unless otherwise specified by the permitting authority.

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## PART VII DEFINITIONS

All definitions contained in Section 502 of the Act and 40 CFR 122 shall apply to this permit and are incorporated herein by reference. For convenience, simplified explanations of some regulatory/statutory definitions have been provided, but in the event of a conflict, the definition found in the Statute or Regulation takes precedence.

**"Best Management Practices (BMPs)"** means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

**"Control Measure"** as used in this permit, refers to any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to waters of the United States.

**"CWA"** means the Clean Water Act or the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq.

**"Director"** means the Director, Arkansas Department of Environmental Quality, or a designated representative.

**"Discharge"** when used without qualification means the "discharge of a pollutant."

**"Discharge of Storm Water Associated with Construction Activity"** as used in this permit, refers to a discharge of pollutants in storm water runoff from areas where soil disturbing activities (e.g., clearing, grading, or excavation), construction materials or equipment storage or maintenance (e.g., fill piles, borrow area, concrete truck washout, fueling), or other industrial storm water directly related to the construction process (e.g., concrete or asphalt batch plants) are located.

**"Discharge-related activities"** include: activities which cause, contribute to, or result in storm water point source pollutant discharges; and measures to control storm water discharges, including the siting, construction and operation of best management practices (BMPs) to control, reduce or prevent storm water pollution.

**"Eligible"** means qualified for authorization to discharge storm water under this general permit.

**"Facility" or "Activity"** means any NPDES "point source" or any other facility (including land or appurtenances thereto) that is subject to regulation under the NPDES program.

**"Illicit Connection"** means any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.

**"Illicit discharge"** means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities.

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**"Large and Medium Municipal Separate Storm Sewer System"** means all municipal separate storm sewer systems that are either:

- (i) Located in an incorporated place with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census; or
- (ii) Located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal, separate storm sewers that are located in the incorporated places, townships or towns within such counties; or
- (iii) Owned or operated by a municipality other than those described in paragraphs (i) or (ii) and that are designated by the Director as part of the large or medium municipal separate storm sewer system.

**"MEP"** means Maximum Extent Practicable, the technology-based discharge standard for municipal separate storm sewer systems to reduce pollutants in storm water discharges. A discussion of MEP as it applies to small MS4s is found at 40 CFR 122.34. CWA section 402(p)(3)(B)(iii) requires that a municipal permit "shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system design, and engineering methods, and other provisions such as the Administrator or the State determines appropriate for the control of such pollutants."

**"Measurable Goal"** means a quantitative measure of progress in implementing a component of a storm water management program.

**"MS4"** means Municipal Separate Storm Sewer System.

**"Municipal Separate Storm Sewer"** means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, and storm drains):

- (i) Owned or operated by a state, city, town, county, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under section 208 of the Clean Water Act (33 U.S.C. 1288) that discharges to waters of the United States;
- (ii) Designed or used for collecting or conveying storm water;
- (iii) That is not a combined sewer; and
- (iv) That is not part of a publicly owned treatment works.

**"NOI"** means Notice of Intent to be covered by this permit.

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**"NOT"** means Notice of Termination.

**"Outfall"** means a point source as defined by 40 CFR 122.2 that discharges to waters of the United States through municipal separate storm sewers, or pipes, tunnels or other conveyances to other waters of the United States and that is not a municipal separate storm sewer system.

**"Owner or operator"** means the owner or operator of a municipal separate storm sewer system under the NPDES program.

**"Permitting Authority"** means the Arkansas Department of Environmental Quality.

**"Physically Interconnected"** means that one municipal separate storm sewer system in a permit area is connected to a second municipal separate storm sewer system for direct discharges into the second system.

**"Point Source"** means any discernible, confined and fixed discharge of pollutants from a pipe, ditch, channel, tunnel, conduit, well, discrete point, structure, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other man-made or natural conveyance or structure from which pollutants are or may be discharged. This term does not include return flows from agriculture or agricultural storm water runoff.

**"Pollutant"** is defined at 40 CFR 122.2. A pollutant includes: dredged spoil, solid waste, incinerator residue, leachate, silts, oil, rock, sand, cellar dirt, and industrial or municipal waste.

**"Regulated Small Municipal Separate Storm Sewer System"** means all municipal separate storm sewer systems that are either:

- (i) Located within the boundaries of an area with a population of 50,000 or more as determined by the latest Decennial Census by the Census Bureau;
- (ii) Owned or operated by a municipal government or other entity under municipal jurisdiction with a population of at least 5,000 people per square mile; or
- (iii) Owned or operated by a municipal government or other entity under municipal jurisdiction that contributes substantially to the pollution of a municipal separate storm sewer system.

The term Regulated Small MS4 in this permit area means the permittee and the owner/operator.

**"Significant contributors of pollutants"** means any activity that causes or could cause or contribute to a violation of surface water quality standards.

point where a municipal separate storm sewer system is connected to another municipal separate storm sewer system through open conveyances connecting two municipal separate storm sewer systems which connect segments of the same stream or other waters of the United States.

any activity or activity" subject to regulation under the NPDES program. This term includes any activity that causes or could cause or contribute to a violation of surface water quality standards.

storm sewer system is connected to a second municipal separate storm sewer system for direct discharges into the second system.

conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete point, structure, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other man-made or natural conveyance or structure from which pollutants are or may be discharged. This term does not include return flows from agriculture or agricultural storm water runoff.

definition includes: dredged spoil, solid waste, incinerator residue, leachate, silts, oil, rock, sand, cellar dirt, and industrial or municipal waste.

means all municipal separate storm sewer systems that are either:

(i) Located within the boundaries of an area with a population of 50,000 or more as determined by the latest Decennial Census by the Census Bureau;

(ii) Owned or operated by a municipal government or other entity under municipal jurisdiction with a population of at least 5,000 people per square mile; or

(iii) Owned or operated by a municipal government or other entity under municipal jurisdiction that contributes substantially to the pollution of a municipal separate storm sewer system.

The term Regulated Small MS4 in this permit area means the permittee and the owner/operator.

any activity that causes or could cause or contribute to a violation of surface water quality standards.

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**"Small Municipal Separate Storm Sewer System"** all separate storm sewers that are:

- (i) Owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States.
- (ii) Not defined as "large" or "medium" municipal separate storm sewer systems in accordance with this permit (i.e., an incorporated place with a population of less than 100,000 as determined by the latest Decennial Census by the Bureau of Census).
- (iii) This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

**"Storm Water"** means storm water runoff, snow melt runoff, and surface runoff and drainage.

**"Storm Water Associated with Construction Activity"** means the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to construction activity. Discharges of storm water from large construction sites (those areas that will result in the disturbance of five (5) or more acres of total land area or less than five acres of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb five acres or more) and small construction sites (those areas that will result in the total disturbance of greater than one (1) acre and less than five acres of total land area or less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb one acre or more), (henceforth referred to as storm water discharges from construction activities).

**"Storm Water Management Program (SWMP)"** means a comprehensive program to manage the quality of storm water discharged from the municipal separate storm sewer system.

**"Total Maximum Daily Loads (TMDL)"** means for waters that are not meeting water quality standards or have a significant potential not to meet standards as a result of point source discharges or nonpoint source activities, TMDL's are developed which establish the maximum amount of a pollutant that can enter a specific water body without violating the water quality standards. The values are normally calculated amounts based on dilution and the assimilative capacity of the water body. Calculations are performed by various models which predict safe levels of contaminants based on worst-case conditions and providing a margin of safety. The calculated safe amounts then may be allocated to point source discharges as a wasteload allocation (WLA) and to nonpoint sources as a local allocation (LA). This constitutes a TMDL.

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**"Urbanized Area"** means the areas of urban population density delineated by the Bureau of the Census for statistical purposes and generally consisting of the land area comprising one or more central place(s) and the adjacent densely settled surrounding area that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile as determined by the latest Decennial Census by the Bureau of Census.

**"Waters of the United States"** means:

- (i) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (ii) All interstate waters, including interstate "wetlands";
- (iii) All other waters such as interstate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
  - Which are or could be used by interstate or foreign travelers for recreational or other purposes;
  - From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
  - Which are used or could be used for industrial purposes by industries in interstate commerce;
- (iv) All impoundments of waters otherwise defined as waters of the United States under this definition;
- (v) Tributaries of waters identified in paragraphs (1) through (4) of this definition;
- (vi) The territorial sea; and
- (vii) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (i) through (vi) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA (other than cooling ponds for steam electric generation stations per 40 CFR 423) which also meet the criteria of this definition) are not waters of the United States. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with ADEQ.



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**APPENDIX I**

**MS4 OPERATOR CONTACT INFORMATION**

These names and addresses should be used when sending information about a project to the MS4 entity involved. Counties are added for reference purposes, but should not be included in address.

**NOTE:** Should difficulty be encountered in notifying an MS-4 entity, the Environmental Division should be contacted.

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**MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) CONTACT  
LIST**

Arkansas State University (Craighead County)  
V.P. for Finance and Administration  
P.O. Box 1530  
State University, AR 72467

Mayor of Barling (Sebastian County)  
City Hall  
PO Bx 23039  
Barling, AR 72923

Benton County Judge (Benton County)  
215 East Central Ave.,#210  
Bentonville, AR 72712

Mayor of Benton (Saline County)  
City of Benton  
PO Bx 607  
Benton, AR 72015

Mayor of Bentonville (Benton County)  
City of Bentonville  
117 W Central Ave  
Bentonville, AR 72712

Mayor of Bethel Heights (Benton County)  
City of Bethel Heights  
530 Sunrise Drive  
Bethel Heights, AR 72764

Mayor of Brookland (Craighead County)  
City Hall  
PO Bx 7  
Brookland, AR 72417

Mayor of Bryant (Saline County)  
City Hall  
210 SW 3<sup>rd</sup> St  
Bryant, AR 72022

Mayor of Cabot (Lonoke County)  
City Hall  
PO Bx 1113  
Cabot, AR 72023

Mayor of Conway (Faulkner County)  
City Hall  
1201 Oak St  
Conway, AR 72032

Crawford County Judge  
Crawford County Courthouse  
300 Main Street, Rm 4  
Van Buren, AR 72956

Mayor of Elkins (Washington County)  
City Hall  
PO Bx 331  
Elkins, AR 72727

Mayor of Elm Springs (Washington County)  
City Hall  
PO Bx 74  
Elm Springs, AR 72728

Mayor of Farmington (Washington County)  
P.O. Box 150  
Farmington, AR 72730

Mayor of Fayetteville (Washington County)  
113 West Mountain  
Fayetteville, AR 72701

Fort Smith (Sebastian County)  
City Administrator  
PO Bx 1908  
Fort Smith, AR 72902

**2008 EROSION AND SEDIMENT CONTROL  
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**MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) CONTACT  
LIST (CONTINUED)**

Garland County Judge  
Garland County Courthouse  
501 Ouachita Ave, Room 210  
Hot Springs, AR 71901

Mayor of Greenland (Washington County)  
P.O. Box 67  
Greenland, AR 72737

Hot Springs City Manager (Garland County)  
133 Convention Avenue  
Hot Springs National Park, AR 71902

Mayor of Jacksonville (Pulaski County)  
No. 1, Municipal Drive  
Jacksonville, AR 72076

Jefferson County Judge  
Jefferson County Courthouse  
101 W Barraque  
Pine Bluff, AR 71601

Mayor of Johnson (Washington County)  
P. O. Box 563  
Johnson, AR 72741

Mayor of Jonesboro (Craighead County)  
P.O. Box 1845  
Jonesboro, AR 72403

Mayor of Little Flock (Benton County)  
City Hall  
1500 Little Flock Dr  
Rogers, AR 72756

Little Rock Air Force Base  
314 CES  
Little Rock AFB, AR 72099

City of Lowell (Benton County)  
Storm Water Coordinator  
P.O. Box 979  
Lowell, AR 72745

Mayor of Marion (Crittenden County)  
City Hall  
PO Bx 717  
Marion, AR 72364

Mayor of Maumelle (Pulaski County)  
City of Maumelle  
550 Edgewood Dr., Suite 590  
Maumelle, AR 72113

North Little Rock (Pulaski County)  
Engineering Dept.  
500 W 13<sup>th</sup>  
North Little Rock, AR 72114

Mayor of Pine Bluff (Jefferson County)  
City Hall  
200 E 8<sup>th</sup> Ave  
Pine Bluff, AR 71601

Pulaski County  
Pulaski County Public Works Office  
3200 Brown St  
Little Rock, AR 72114

Mayor of Rogers (Benton County)  
City of Rogers  
300 W Poplar  
Rogers, AR 72756

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**MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) CONTACT  
LIST (CONTINUED)**

Saline County Judge  
Saline County Courthouse  
200 N Main St, Rm 117  
Benton, AR 72015

Mayor of Shannon Hills (Saline County)  
City Hall  
10401 High Road East  
Shannon Hills, AR 72103

Mayor of Sherwood (Pulaski County)  
City Hall  
PO Bx 6256  
Sherwood, AR 72120

Mayor of Springdale (Benton & Washington  
County)  
City of Springdale  
201 Spring ST  
Springdale, AR 72764

Texarkana City Manager (Miller County)  
City Hall  
PO Bx 2711  
Texarkana, AR 75504

University of Arkansas (Washington County)  
Assoc. Director, Design and Construction  
521 South Razorback Road  
Fayetteville, AR 72701

University of Arkansas at Little Rock (Pulaski  
County)  
Physical Plant Director  
2801 South University  
Little Rock, AR 72204

University of Arkansas at Pine Bluff (Jefferson  
County)  
Vice Chancellor of Finance and Admin.  
Mail Slot 4934  
Pine Bluff, AR 71601

University of Arkansas for Medical Sciences  
(Pulaski County)  
Vice Chancellor for Campus Operations  
4301 W Markham, Slot 579  
Little Rock, AR 72205

Mayor of Van Buren (Crawford County)  
1003 Broadway  
Van Buren, AR 72956

Washington County Judge  
2615 Brink Drive  
Fayetteville, AR 72701

Mayor of West Memphis (Crittenden County)  
205 South Redding  
West Memphis, AR 72301

Mayor of White Hall (Jefferson County)  
PO Bx 20100  
White Hall, AR 71611