



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

JUN 09 2009

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

See Attached Addressee List

Re: NPDES Permit No. ALS000003
Shelby County Municipal Separate Storm Water Sewer System

Dear Sirs:

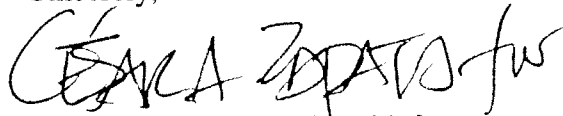
During January 12-14, 2009, the U.S. Environmental Protection Agency (EPA) in conjunction with the Alabama Department of Environmental Management performed a Compliance Storm Water Audit (Audit) of the Shelby County (County) Municipal Separate Stormwater Sewer System (MS4). A Section 308 Information Request (308 Letter) issued pursuant to Section 308 of the Clean Water Act (CWA) was sent to all of the County's Co-Permittees on February 12, 2009. EPA's participation in the Audit and the reasons for the 308 Letter were to evaluate the MS4s' compliance with the treatment and disposal of stormwater in accordance with the requirements of Sections 301 and 402(p) of the CWA, 33 U.S.C. §§ 1311 and 1342(p), the regulations promulgated thereunder at 40 Code of Federal Regulations § 122.26, and the Shelby County MS4 NPDES Permit No. ALS000003 (Permit).

An Audit Report based upon the meetings, inspections, and file reviews at the County's offices, in addition to review of documents presented to EPA has been prepared and is enclosed. A 308 Review Report of the submission from the Alabama Department of Transportation is also enclosed. A third enclosure is the 308 Review Report of the submissions from the Alabama State Parks Division, and the Cities of Alabaster, Helena, Indian Springs, Moody and Pelham. These Reports identify several issues which require the MS4s to provide clarification to EPA. The Reports findings are presented according to program element and contain both Permit *Requirements* and *Recommendations* to strengthen the MS4 program.

The Permit *Requirements* outlined in the Reports are subject to enforcement action pursuant to Section 309 of the CWA. This Section provides for the issuance of compliance orders, administrative actions to assess penalties and/or the initiation of civil or criminal actions. In order to resolve these issues, EPA is offering each of you the opportunity to discuss the violations. EPA requests that representatives from Shelby County, the Cities of Alabaster, Helena, Indian Springs, Moody and Pelham, the Alabama State Parks Division, and the Alabama Department of Transportation be present in EPA's office on Tuesday, June 30, 2009, at 1:00 p.m. to discuss the reports and EPA's possible enforcement action. Representatives should be prepared to provide all relevant information with documentation, pertaining to the violations including, but not limited to, any financial information which may reflect your ability to pay a penalty. You have the right to be represented by legal counsel. Failure to appear may result in an immediate enforcement action.

Please contact Ms. Susan Pope at (404) 562-9770 to discuss report findings or the meeting. Please address written comments to the address on the letterhead.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Plymale", with a stylized flourish at the end.

Christopher L. Plymale, Chief
East NPDES Enforcement Section
Clean Water Enforcement Branch
Water Protection Division

Enclosure

cc: Alabama Department of Environmental
Management

List of Addressees:

Mr. Robert Kelley
Environmental Manager
Shelby County Environmental Office
504 Highway 70
Columbiana, Alabama 35051

The City of Alabaster
c/o The Honorable David Frings
Mayor of Alabaster
P. O. Box 277
Alabaster, Alabama 35007

City of Helena
c/o The Honorable Charles W. Penhale
Mayor of Helena
P. O. Box 262
Helena, Alabama 35080

City of Moody
c/o The Honorable Joe Lee
Mayor of Moody
2900 Daniel Drive
Moody, Alabama 35004

Mr. Mark Easterwood
Director, State Parks Division
Alabama Department of Conservation
and Natural Resources
64 North Union Street
Montgomery, Alabama 36130

Mr. D. J. McInnes
Director, Alabama Department of
Transportation
1409 Coliseum Boulevard
Montgomery, Alabama 36130

City of Indian Springs
c/o The Honorable Steve Zerkis
Mayor of Indian Springs
88 Indian Creek Road
Indian Springs, Alabama 35124

City of Pelham
c/o The Honorable Don Murphy
Mayor of Pelham
P. O. Box 1419
Pelham, Alabama 35124



United States Environmental Protection Agency
Washington, D.C. 20460
Storm Water Compliance Inspection Report

Section A: National Data System Coding (i.e., PCS)

Transaction Code N	NPDES ALS000003	yr/mo/day 09/01/12-14	Inspection Type (Inspector J	Fac Type 2
Remarks					
Inspection Work Days	Facility Self-Monitoring Evaluation Rating	BI	QA	-----Reserved-----	

Section B: Facility Data

Name and Location of Facility Inspected (For industrial users discharging to POTW, also include POTW name and NPDES permit number) Shelby County Municipal Separate Storm Sewer System (MS4) Shelby County, Alabama	Entry Time/Date 01/12/09- 1:00 PM	Permit Effective Date 11/01/01
	Exit Time/Date 01/14/09- 5:30 PM	Permit Expiration Date 10/31/06
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Mr. Robert Kelley Environmental Manager Shelby County Commission 506 Highway 70 Columbiana, Alabama 35651 (205)669-3737, Fax (205)669-3871	Other Facility Data (e.g., SIC NAICS, and other descriptive information) The following people were also present during the MS4 Audit: Chad Scroggins- Shelby County W. Byron Woods- Municipal Consultants, Inc.	
Name, Address of Responsible Official/Title/Phone and Fax Number Mr. Robert Kelley Environmental Manager Shelby County Commission 506 Highway 70 Columbiana, Alabama 35651 (205)669-3737, Fax (205)669-3871		

Section C: Areas Evaluated During Inspection (Check only those areas evaluated)

<input checked="" type="checkbox"/> Permit	<input type="checkbox"/> Self-Monitoring Program	<input type="checkbox"/> Pretreatment	<input checked="" type="checkbox"/> MS4
<input checked="" type="checkbox"/> Records/Reports	<input type="checkbox"/> Compliance Schedules	<input type="checkbox"/> Pollution Prevention	
<input type="checkbox"/> Facility Site Review	<input type="checkbox"/> Laboratory	<input type="checkbox"/> Storm Water	
<input type="checkbox"/> Effluent/Receiving Waters	<input type="checkbox"/> Operations & Maintenance	<input type="checkbox"/> Combined Sewer Overflow	
<input type="checkbox"/> Flow Measurement	<input type="checkbox"/> Sludge Handling/Disposal	<input type="checkbox"/> Sanitary Sewer Overflow	

Section D: Summary of Findings/Comments

(Attach additional sheets of narrative and checklists, including Single Event Violation codes, as necessary)

SEV Codes	SEV Description

Name(s) and Signature(s) of Inspector(s) Araceli Bonilla	Agency/Office/Phone and Fax Numbers US EPA Water Protection Division-Clean Water Enforcement Branch-East Enforcement Section (404) 562-9790, (404) 562-9729 (fax)	Date 06/03/09
Signature of Management Q A Reviewer Chris Conner, Chief	Agency/Office/Phone and Fax Numbers US EPA Water Protection Division-Clean Water Enforcement Branch-West Enforcement Section (404) 562-9794, (404) 562-9729 (fax)	Date 6/3/09

Municipal Separate Storm Sewer System (MS4) Audit
Shelby County, Alabama
NPDES Permit Number: ALS000003
January 12-14, 2009

The U.S. Environmental Protection Agency (EPA), Region 4 conducted a Municipal Separate Stormwater Sewer System (MS4) Audit (Audit) during the period January 12-14, 2009, of the Shelby County (County) MS4. The audit team included Messrs. Kenneth Kwan and Namon Mathews, and Ms. Araceli Bonilla of EPA, Region 4. Ms. Lee Warren and Ms. Vernetta Holdren of the Alabama Department of Environmental Management (ADEM) also took part in the Audit. The County was issued National Pollutant Discharge Elimination System (NPDES) Permit No. ALS000003 (Permit) for its MS4, by the ADEM. The Permit became effective November 1, 2001, and expired on October 31, 2006. The renewal application was submitted as a part of the Year Four Annual Report and the Permit was continued in force until such time as a renewal Permit is issued. Under the Permit, the County is required to implement the components of the Storm Water Management Program (SWMP) developed in accordance with the Permit and applicable stormwater regulations. The County has several co-permittees (Cities of Alabaster, Helena, Indian Springs, Pelham, Moody, the Alabama State Parks Division and the Alabama Department of Transportation), which were not a part of the County Audit conducted by EPA. The purpose in conducting the Audit was to assess the County's compliance with the Permit, the SWMP, and the Clean Water Act (CWA) Stormwater Regulations found at 40 Code of Federal Regulations (C.F.R.) § 122.26.

The following will be addressed in further detail in this report: Annual Report; SWMP Administration; Structural Controls and Stormwater Collection System Operation; Areas of New Development and Significant Redevelopment; Roadways; Flood Control Projects; Pesticides, Herbicide and Fertilizer Applications; Illicit Discharge Detection and Elimination Program; Spill Prevention and Response; Industrial, Commercial, High Risk, and Municipally-Owned Industrial Run-off; Construction Site Runoff Program; Public Education and Outreach Programs; and Monitoring.

I. Annual Report

The County has been submitting to ADEM, the Annual Reports required by the expired administratively continued Permit. The Annual Reports are due on or before December 28th following the reporting period of October 1st -September 30th. Each report must include a comprehensive summary of all the SWMP activities conducted during the reporting period. For the purpose of this Audit Report, EPA references the 2008 Annual Report to document the basis for the findings of the Audit. During review of the Annual Report, it was noted that the County failed to provide a complete summary table of all program activities as required by Part V.B.3 and Part V.B.8 of the Permit. The summary table should provide, in addition to other information specified in Part V.B.3.a of the Permit, a summary of yearly activities for construction inspections and enforcement actions, public education activities, and any floodway retrofit projects for water quality

improvement. Also, yearly activities for each of the eight (8) co-permittees should be provided in a summary table as part of the Annual Report. Additionally, the SWMP did not contain dates for completion of many of the activities listed.

The County also failed to include a complete fiscal analysis for each permittees' program implementation, both for the past calendar year and the next as part of the supporting documentation in the Annual Report, as required by Part V.B.6 of the Permit. More detailed financial information was provided to the Audit Team during and after the Audit. However, the budget and expenditures are limited to consulting fees, sampling costs, roadway litter control, education outreach, and construction plan review and inspections. There was no financial information for industrial inspections, dry weather screening for illicit discharges, structural control maintenance, pesticide/herbicide/fertilizer controls, oil/household hazardous waste program, and spill prevention/response. Also, funding sources for the implementation of each program element were not discussed in the 2008 Annual Report.

The Draft Permit provided in the Annual Report was never finalized by ADEM and is not the effective Permit. A copy of the effective Permit is attached to this Audit Report. Part V.B of the Permit requires each Permittee to contribute to the preparation of the Annual Report; to sign and certify the Annual Report and include a statement or resolution that the Permittee's governing body (or representative) has reviewed or been apprised of its contents. This information was not contained in the Annual Report.

A Major Accomplishment noted in the 2008 Annual Report is that the City of Leeds had joined the Shelby County MS4. The City of Leeds remains covered under NPDES Permit No. ALS000001 until a Permit Modification to both Permits, ALS000001 and ALS000003, is made or renewal NPDES Permits are issued. The City of Leeds' Annual Reporting obligation is with the ALS000001 Permit.

Required: Ensure that the Annual Reports are complete and report all components required by the Permit and the SWMP. The Co-Permittees must sign and provide specific information related to the MS4 Programs of each as required by Part V of the Permit. Review the attached Permit and adjust the SWMP as necessary to achieve compliance.

II. SWMP Administration

The County has been operating the stormwater management system since 1997. The Environmental Services (ES) office under Mr. Robert Kelley, Environmental Manager, assumes the responsibility for program management and annual reporting to ADEM. The actual compilation of the Annual Report along with some of the industrial inspections is handled by Mr. W. Byron Woods, a consultant, with Municipal Consultants, Incorporated.

The County's MS4 Program is not implemented solely by the ES. There are many employees or full time equivalents associated with other County entities that assist in

implementation. However, it is unclear, if the County has a plan to measure the effectiveness of their MS4 Program. The SWMP is required, under Part II of the Permit, to include controls necessary to reduce the discharge of pollutants from the Municipal Separate Storm Sewer System to the maximum extent practicable (MEP). The SWMP has not delineated clear, measurable goals or environmental indicators for reaching MEP. End dates for accomplishment of stormwater related activities were not provided in the SWMP. The current SWMP has not been revised since 2002.

It is unclear exactly how many County employees or contractors are currently working on stormwater issues since not all employees are paid out of one source of funding. Details on the major stormwater programs are provided later in this report.

There is no indication in the SWMP that the co-permittees acknowledge a commitment to SWMP implementation. Part II.D of the Permit states the SWMP shall clearly define roles/responsibilities of each Permittee. Parts II.D.4 and 5 require an interjurisdictional agreement or contract delineating responsibility for SWMP implementation if such implementation is shared by another party. Neither the SWMP nor the Annual Report contain such agreements.

Required: To comply with Part II.D of the Permit, each co-permittee must acknowledge its Permit requirements and SWMP implementation requirements. The SWMP must be revised to include the roles/responsibility of each of the co-permittees. If interjurisdictional agreements or contracts are necessary, then these documents should be executed.

Recommendation: As the MS4 Program continues to grow and all aspects are implemented, additional personnel may be necessary to carry-out an effective MS4 Program. The County should modify its SWMP to add quantitative and qualitative goals and measures for the County's MS4 Program, and to expand its industrial and construction programs to provide for inspection and enforcement of NPDES permitted facilities. The SWMP has not been reviewed since 2002 and needs to be made current to include growth and changes in the stormwater program.

III. Structural Controls

Shelby County's structural controls consist of a variety of stormwater management structures such as grass and concrete swales, detention basins, ponds, and structures located within privately owned subdivisions. The County is ultimately responsible for maintenance and repair of seven (7) structural controls that are owned by the City of Indian Springs and the City of Helena. The City of Indian Springs owns, operates, and maintains two (2) detention ponds that are located on school property on Caldwell Mill Road. The City of Helena owns, operates, and maintains three (3) detention basins and two (2) retention basins. The City of Indian Springs' detention basins are located on Alabama Highway 261 North at Chadwick Subdivision, at the end of Old Kendrick Road in the Laurel Woods Subdivision and on Shelby County Road 58 in Village Parish Subdivision. The City of Helena's two (2) retention basins are located

on Shelby County Road 95 at the Shoppers of Dearing Downs and at Joe Tucker Park Lake.

On January 14, 2009, EPA accompanied by ES inspectors Messrs. Byron Woods and Chad Scroggins, visited the large lake retention basin at Joe Tucker Park and the retention basin at the Shoppers of Dearing Downs. The site visits were not an evaluation of ES's structural control inspection process. While visiting the Joe Tucker Park retention basin, a small amount of trash was observed floating near the inlet structure. During the site visit of the retention basin at the Shoppers of Dearing Downs, a significant amount of erosion and scouring was documented at the drainage ditch that was leading into the basin and draining from Roy Drive. A fair amount of erosion was also noted around the perimeter of the outfall structure that deposits stormwater through a culvert that runs under Roy Drive. Subsequent to our site visit to the basin at the Shoppers of Dearing Downs, an inspection that was conducted by ES on September 4, 2008, also noted erosion problems in the bottom of the drainage swale that drains Roy Drive. Although erosion of the drainage ditch may have contributed to the deposition of sediment into the basin, there was no evidence that the erosion damage at the outfall impaired its ability to function properly.

During the interview process, it was noted that maintenance to structural controls are conducted by both ES and Shelby County Highway Department (SCHD) maintenance departments. In response to EPA's January 29, 2009, list of follow up questions, ES indicated that "Once deficiencies are noted in the structural control inspection, the appropriate municipality is contacted and corrective actions are discussed. Corrective actions are then implemented by the municipality." The maintenance crew supervisor maintains a daily log of maintenance activity. However, information gathered from the 2008 Annual Report summary table, the records review, and the interview process indicated that structural control inspections are conducted semi-annually by either of the respective Cities or by the County, and additional inspections are triggered by citizen complaints. Representatives also indicated that the type of corrective action response and resources available will dictate the response time. It was noted that SCHD's personnel had not been briefed or trained on how their duties are integrated into the MS4 maintenance program. Work assignments are addressed through the *EYES* program process that is discussed in more detail in the Roadways Section.

Recommendations: Conduct MS4 training and create standard operating procedures (SOPs) between ES, SCHD and other co-permittee related personnel, that focuses on roles and responsibilities of Departments, written procedures for inspections/corrective actions, etc., and articulate how they are integrated to ensure removal of pollutants to the MEP.

IV. New Development and Regional Master Planning

On September 30, 2004, the County adopted the *Shelby County Comprehensive Plan* as part of their master planning strategy for the entire county in accordance with Part II.A.2 of the Permit. Part II of the Plan, Strategic Development Concept, outlines

various strategies to be incorporated for future development, such as green infrastructure, mixed-use developments, open space, and conservation subdivision techniques. Green infrastructure, mixed-use developments, open space and conservation techniques are addressed and discussed when a new development applies for a Building Permit through the Shelby County Planning Commission Department of Development Services. More information about the Building Permit process can be found in the Construction Site Run-off Section.

Another way the County intends to implement these development strategies and concepts is through zoning and subdivision regulations. On February 12, 2007, the County adopted the *Subdivision Regulations of Shelby County, Alabama*. Article 6, Section 04 of the *Subdivision Regulations* specifically addresses stormwater facilities to minimize excess stormwater runoff in the development process. Again, through the Building Permit process the County evaluates all impacts that a new development may pose in relation to sediment and erosion control and stormwater runoff. The *Subdivision Regulations* apply to all new development and re-development in Shelby County.

As part of new development under the *Subdivision Regulations*, property owners and/or the Homeowners Association must comply with the following:

“Shelby County is not responsible for the maintenance of any easements shown on this plat outside of the public right-of-way. All easements on this map are for public utilities, sanitary sewers, storm sewers, storm ditches, and may be used for such purposes to serve the property both within and without the subdivision.”

Required: A comprehensive master planning process (or equivalent) to develop, implement, and enforce controls to minimize the discharge of pollutants from areas of new development and significant re-development after construction is completed in accordance with Part II.A.2 of the Permit.

Recommendations: Ensure the County has legal authority to implement stormwater regulations and ordinances and a post-construction program.

V. Roadways

The ES office has launched a comprehensive litter control program called EYES. EYES provides a 24-hour complaint service for County employees and citizens who have the option to call or e-mail any environmental complaints observed throughout Shelby County. Although, there was no discussion of a written SOP, Chad Scroggins described follow up procedures that are initiated by a complaint. Once a complaint is fielded, a work request form is initiated, completed, and forwarded to the roadways maintenance department. Representatives indicated that the type of corrective action response and resources available will dictate the response time. Because of limited county resources, ES and the SCHD share roadway duties throughout the County. ES has three (3) litter control teams consisting of a supervisor employed by ES and three (3) inmates from the Department of Corrections. Litter control teams clean-up trash and grass along the

roadways only. Mr. Chad Scroggins indicated that as a standard to ensure removal of pollutants to MEP, the litter control teams collect litter from all roadways and drainage swales throughout the County, on a quarterly basis. As a way to track quarterly progress and ensure that all roads and drainage swales are addressed, at the end of each work shift, roadways and drainage swales that have been addressed are highlighted with color codes on a County road map that is centrally located at the environmental office. Litter control teams also maintain a daily record of the number of loads and weight of trash collected at the end of each shift. SCHD maintenance crew consists of a crew chief, a flag person and three (3) equipment operators. They are responsible for mowing grass, trimming trees, and pesticide application County wide. The crew supervisor maintains a daily log of all work activity. It was noted that SCHD's personnel had not been briefed or trained on how their duties are integrated into the MS4 maintenance program.

Required: Review of the 2008 Annual Report revealed that the summary table did not contain roadway compliance activities or accomplishments as required by Part V.B.3a(3) and Part V.B.3b(2) of the Permit and there was no narrative discussing the overall progress or success of the program.

Recommendations: Conduct MS4 training and create an SOP between ES, SCHD and other co-permittee related personnel that focuses on the roles and responsibilities of their respective Departments and articulates how they are integrated to ensure removal or reduction of pollutants to the MEP. Provide information about the County EYES program on the County webpage.

VI. Pesticides, Herbicides, and Fertilizer Application

Stated under the General Discussion subheading of Section F, of the 2008 Annual Report, ES maintains a certified herbicide applicator on staff, who is responsible for the pesticides program implementation. This paragraph further indicates that this program is adapted from the State of Alabama Vegetation Program each year. In an effort to adequately comply with all requirements of the Pesticides, Herbicides, and Fertilizer (chemical) Application component of the MS4 Permit, ES relies on partnerships with SCHD and the Alabama Commissioner of Agriculture and Industries (ACAI); however, written agreements were not discussed during the interview process. For example, as stated in the Annual Report, ACAI is responsible for administering and enforcing the 1940 Professional Service Law, the 1971 Alabama Pesticide Law, and the Customs Pesticides Applicator Law. These laws regulate the sale, distribution, transportation, application, and applicator certification of pesticides within the State of Alabama. ACAI is also responsible for issuing State chemical applicator licenses and certifications to SCHD personnel. SCHD personnel are responsible for chemical application at County parks, right-of-ways and roadsides. During the interview process, Mr. Larry Hicks, Operating Supervisor, indicated that the maintenance crew is required to apply a winter and a summer chemical treatment. Although chemical use patterns were not discussed, Mr. Hicks indicated that mowing operations have been increased as a strategy to decrease the need for pesticides; he also indicated that additional chemicals may be applied as needed.

EPA was able to review the State Pesticide Licenses and Certifications of SCHD members that were present during the interview. Mr. Hicks provided EPA with a copy of a chemical treatment report and a field checklist that is completed during application of chemicals. The checklist provides information such as the start and end time of application, location, temperature, name of the person applying chemicals, equipment type, chemical mix, and total acreage of application, which was not quantified and or summarized in the Annual Report as required by the Permit. It was also noted that SCHD's personnel and crew had not been briefed or trained on how their duties are integrated into the MS4 maintenance program. ES indicated in the information provided prior to the Audit and during the interview process, that the Counties chemical storage facilities were located outside of the MS4's jurisdiction, hence, the requirement to implement BMP's to reduce related pollutants within the MS4's boundaries was not applicable. Other educational program elements that were designed to assist with reduction of chemical use are further discussed in Section XI, Public Education.

Required: The 2008 Annual Report summary table did not contain chemical reduction compliance activity or accomplishments from SCHD or ACAI as required by Part V.B.3a(8) and Part V.B.3b(2) of the Permit and there was no narrative discussing the overall progress or success of the program. EPA discusses the MS4 "boundaries" in Part XIII.

Recommendations: Conduct MS4 training and create an SOP between ES, SCHD, and related ACAI activities and personnel that focuses on the roles and responsibilities of their respective Departments and articulates how they are integrated into the goals and objectives of the program. The SOP should ensure compliance with the Permit and reduction of pesticide/herbicide/fertilizer entering into the MS4 to the maximum extent practicable. SCHD and ACAI should track and submit to ES all quantifiable and related program data such as number of related phone calls, distributed educational material, amount of grass cut, and amount of chemical applied to assist ES with compliance with Part V.B.3a(8) and Part V.B.3b(2) of the Permit.

VII. Illicit Discharges and Improper Disposal

Shelby County manages the illicit discharge and improper disposal program with financial assistance provided by its co-permittees. The program focuses mainly on dry-weather screening of all known outfalls (approximately 1,429 outfalls). Of the 1,429 outfalls, approximately forty percent (40%) are ditches. The County maintains a yearly goal of conducting at least twenty percent (20%) dry-weather screening per year. Outfalls are randomly selected for testing each year. A field data sheet is filled out for each outfall evaluated. Screening procedures may also include walking the river banks and road sides. The County has a target list of twenty-five (25) priority outfalls within the MS4 based on history of past dry-weather discharges. These priority outfalls will remain on the list and continue to be re-inspected annually until no illicit connections are found. The County normally updates this priority list when other outfalls with illicit

discharge are discovered. However, the County did not identify any illicit discharges from their dry weather screening program in their 2005-2008 Annual Reports.

The 2007 MS4 Annual Report stated that 162 outfalls have been inspected, an eleven percent (11%) coverage rate. The 2008 MS4 Annual Report stated that 1,062 outfalls have been inspected in the past five (5) years. This level of effort falls short of the required goal of screening at least twenty percent (20%) of the outfalls per year as set forth in the Shelby County MS4 Storm Water Management Program, and 1,429 stormwater outfalls once in five (5) years.

Appendix 3 of the 2008 MS4 Annual Report, the Outfall Inventory List, contains dry-weather screening inspections dated from 2001 to 2003. These inspections need to be updated in the Annual Report with inspections conducted from 2004 to 2008. The County presented inspections conducted from 2004 to 2008 to EPA and ADEM during the Audit as part of the records review.

A review of the Dry-Weather Screening Data Sheet showed at least four (4) to five (5) instances where the inspector noted corrections in types of outfall pipe, pipe size, etc. This new and revised information regarding the outfall characteristic needs to be entered into the site description and/or pipe size column in Appendix 3 of the Annual Report.

Section 01-049 of the Shelby County Storm Water Management Ordinance does not provide for the authority to request a schedule for removal of illicit discharges. The Permit has a specific requirement for setting a compliance schedule in a situation where elimination of such discharges within ten (10) working days is not possible.

Required: Shelby County should follow the required goal as set forth in the Shelby County MS4 Storm Water Management Program of screening at least twenty percent (20%) of the outfalls per year (285 outfalls), and all of the 1,429 stormwater outfalls once in five (5) years.

Part V.B.7 of the Permit requires the Annual Report to include data that is accumulated throughout the reporting year. The 2008 Annual Report, at a minimum, should include all dry-weather screening inspections for the current report year. Also, it is recommended that Appendix 3 should track these inspections for the past five (5) years to ensure that all 1,429 outfalls have been inspected for illicit discharges at a frequency of twenty percent (20%) per year.

Part V.B.7 of the Permit requires the Annual Report to include a summary of data that is accumulated throughout the report year period. The MS4 Annual Report should be updated each year to include any new and revised information regarding the outfall characteristics.

Part II.A.6.d of the Permit states that when elimination of an illicit discharge within ten (10) working days is not possible, Shelby County shall have the

authority to require an expeditious schedule for removal of the discharge. Section 01-049 of the Shelby County Storm Water Management Ordinance does not have such authority to request a schedule for removal of illicit discharge in a situation where elimination of such discharges within ten (10) working days is not possible. Per Part II.A.6.d of the Permit, the Shelby County Storm Water Management Ordinance should include this permit provision with authority to set a compliance schedule if elimination of an illicit discharge within ten (10) working days is not possible.

VIII. Spill Prevention and Response

Mr. Don Greene, Director of the Shelby County Emergency Management Agency (EMA), responds to hazardous material spills along with two-three (2-3) other staff members, all under the ES office. The County's EMA also has access to two (2) Haz-Mat Response Teams and five (5) Fire Departments which are used for decontamination situations. The County's *Hazardous Materials Emergency Response Plan* outlines the procedures for how to respond to a spill or hazardous materials incident and the roles and responsibilities of the responders as required by Part II.A.7 of the Permit. Spills are tracked through the Alabama Emergency Response Commission tracking system and files are kept on each incident at the County's ES office. The County EMA does not have a way to track which spills or hazardous material incidents have occurred within the MS4 area. The EMA does not have a copy of the MS4 area map in which to annotate the incidents.

Required: A Spill Prevention and Response Program shall be implemented to prevent, contain, and respond to spills that may discharge into the MS4 in accordance with Parts II.A.7 of the Permit. The County must be prepared to respond to other spills, those not quantified as "hazardous", to the MS4.

Recommendations: The County should complete an evaluation of the results and effects of spills and hazardous materials incidents in the MS4. The County should coordinate the Spill Prevention and Response Program for anything other than hazardous materials with all County Departments involved with stormwater issues.

IX. Industrial and High Risk Runoff

Shelby County conducts industrial inspections within the MS4, including facilities located within their co-permittees' jurisdiction. Currently, the County has a database of 167 industrial facilities contained in Table 3 of the 2008 Annual Report. These industries are mainly commercial and light industrial facilities with no NPDES permits. NPDES facilities with permits issued by ADEM are not inspected by Shelby County. The industrial and high risk runoff program in Part II.A.8 of the Permit requires the County to implement an inspection and monitoring program for all industrial or commercial discharges that can contribute to pollutant loadings to the MS4. The County industrial inspection commitment must also include NPDES facilities with permits issued by ADEM. Inspections are prioritized by dry-weather screening results, requests by ADEM, and citizen complaints. The County is committed to conduct these non-NPDES industrial

inspections at a rate of twenty (20) facilities per year. The County has a landfill, municipal facilities, and industrial facilities within the Shelby County political boundary. However, Shelby County conducts no monitoring of these industrial and high risk facilities since these facilities are located outside of their imposed MS4 boundary (limited to the Cahaba River watershed. The CWA requires Phase I permittees to permit their entire system by political boundary not limited to a watershed boundary. The County can focus activities in urbanized and watershed areas but the industrial and high risk runoff program should cover the whole political boundary. The industrial facilities' list is updated annually based on the Emergency Planning and Community Right-to-Know Act report submitted to the County by the facilities. Also, any new businesses relocated to the County are updated to the industrial database based on new building permits and/or business license applications.

In Table 3 of the 2008 MS4 Annual Report, the industrial and commercial inspection list contains inspections dating from 1999 to 2003. The inspection list needs to be updated with the more current inspections conducted from 2004 to 2008, as kept on file by the County and presented to ADEM and EPA during the file review process.

On January 14, 2008, EPA and ADEM conducted an oversight evaluation of Shelby County's industrial inspection program. Two (2) industrial facilities were selected from the industrial list in Table 3 of the 2008 Annual Report. According to the County database these facilities are not required to have an NPDES permit. Shelby County inspectors, Messrs. Byron Woods and Chad Scroggins, led the inspections.

Deshazo Crane Company – January 14, 2009

The County inspectors conducted an industrial inspection utilizing a Storm Water Discharge Inspection Form. The inspection focused mainly around the perimeter of the site. All storm drains, exposed materials and any outdoor industrial activity were evaluated for any potential contaminated runoff. Some minor housekeeping issues were noted along the eastside of the facility. However, the facility representative stated that approximately ten percent (10%) of their steel beams undergo sand blasting operations outdoors. There were no BMPs to collect the waste sand running off into an unprotected storm drain. Also, a sink for equipment wash drains washes water directly outside of a building onto a concrete area. The facility personnel stated that this line will be tied into a sanitary line. In the exit conference the County inspectors provided a summary of their findings. The facility representative was informed of the need to design BMPs for their outdoor sand blasting operations and install inlet protection at the storm drains. Based on their outdoor industrial activity, and the high potential for contaminated stormwater runoff, this facility needs to apply for NPDES permit coverage from ADEM (ALG120000) to address stormwater discharges.

Vulcan Engineering – January 14, 2009

The County inspectors walked around the perimeter of the entire site to look for anything with potential for contaminated runoff. There were sand and/or black sand piles

stored behind a bag house, building number seven (7), and building number eight (8) with no BMPs. A large amount of green color particles were stuck on the exhaust fan and on the ground at building number eight (8). These outdoor storage facilities of waste and process sand materials are located right next to the receiving water with no buffer or BMPs. In the exit conference, the facility was informed of the need to address BMPs and housekeeping around the outdoor sand storage area by the County. The County will re-inspect the site within thirty (30) days. Based on the outdoor sand storage and the high potential for contaminated stormwater runoff, this facility needs to apply for NPDES permit coverage from ADEM to address stormwater discharges.

A file review of past industrial inspections has shown that a major portion of the Storm Water Discharge Inspection Form was not filled out completely. The Section regarding the description of significant material treated, stored or disposed outside of the facility and any BMP to minimize contaminated stormwater runoff was often left blank.

One of the main focuses of the industrial stormwater inspection program was to assess the facilities' potential for contaminated stormwater runoff into the MS4. It is important to inspect all industrial and commercial facilities regardless of whether it has an NPDES permit. Section 01-036 of the Shelby County Storm Water Management Ordinance give the County the legal authority to monitor stormwater facilities including those facilities which hold current NPDES permits. Also, Part II.A.8 of the Permit requires the County to implement an inspection and monitoring program for all industrial and commercial discharges and not limited to just non-NPDES facilities

Required: Part V.B.7. of the Permit requires the Annual Report to include data that is accumulated throughout the report year period. The 2008 MS4 Annual Report, at a minimum, should include all industrial and commercial inspections for the current report year. Also, it is recommended that Table 3 should track these inspections for the past five (5) years to ensure that all industrial and commercial facilities have been inspected once during each permit cycle. Part II.A.8 of the Permit required an industrial and high risk runoff program to control pollutants from all industrial and commercial discharges. The Shelby County Storm Water Management Ordinance gives the County the legal authority to monitor stormwater facilities including those facilities which hold current NPDES permits. Neither of these legal documents specified any exclusion for NPDES permitted facilities. During the exit conference, the County has stated to EPA that they will inspect industrial NPDES facilities in the future.

Recommendation: Shelby County inspectors should be trained regarding the scope of ADEM's general NPDES permit requirements. As part of their inspection evaluation, the inspector should determine whether an NPDES permit from ADEM is required under the CWA's permitting requirements for industrial stormwater sources. Also, the Standard Industrial Codes (SIC) codes as listed in Table 3 of the Annual Report for Deshazo Crane Company and Vulcan Engineering are incorrect and should be changed. For Deshazo Crane Company, the SIC code should be 3536 instead of 3844. Based on an online search, it appears that the SIC code for Vulcan Engineering should be 3541. Based on

the SIC codes, these two (2) facilities are under the categories of industrial activities that require NPDES permit coverage.

The Storm Water Discharge Inspection Form for industrial and commercial inspections needs to be filled out completely. The Section regarding the description of significant material treated, stored or disposed outside of the facility and any BMP to minimize contaminated stormwater runoff needs to be evaluated during the inspection.

The County needs to modify the Storm Water Discharge Inspection Form to include sections on NPDES permit and SWPPP review. These additional sections are needed to address NPDES permitted industrial facilities with potential to discharge stormwater into the County's MS4 system. To implement an industrial program which meets the Permit's MEP requirement, the County must expand its program to address NPDES permitted industrial facilities.

X. Construction Site Runoff Program

Program Implementation

The County only oversees the implementation of the construction site runoff program, which includes inspections and enforcement, for sites with land disturbance under one (1) acre in unincorporated Shelby County. The County and its Co-Permittees are relying upon ADEM to fulfill their construction site runoff requirements for sites with land disturbance of one (1) acre or greater. The County is not fulfilling the education and training components of the construction site runoff program, which are required under Part II.A.9.c of the Permit. EPA does not consider the current Construction Site Runoff Program to meet the requirement to implement controls to reduce pollutants to the MEP, because the County does not have the ability and is not operating a program covering construction sites of one (1) acre or greater. According to the Shelby County Storm Water and Erosion-Sediment Control Ordinance, No. 98-09-28-08, Section 01-019, the County only has legal authority over construction activities that are not required to have an NPDES permit issued by ADEM.

Required: The County Construction Site Runoff Program fails to address NPDES permitted facilities which is a failure to meet the MEP standard imposed under Part II of the Permit. Because NPDES permitted facilities are not regulated, the County is in violation of Part II.E.1 of the Permit which requires the County to have legal authority to "control the contribution of pollutants to the MS4 by stormwater discharges associated with industrial activity and the quality of stormwater discharged from sites of industrial activity."

Building Permit and Site Plan Review Process

Currently, the County does not have a Land Clearing and Grading Permit. Developers are made aware of their responsibilities regarding stormwater management

and construction site runoff when they apply for a Building Permit with the Shelby County Department of Development Services (DDS), as required by Part II.A.9.d of the Permit. Site plans for all sites are submitted with the Building Permit application and are distributed for approval to the City Engineer, ES, Utilities, and the Fire Department. ES reviews the plan to ensure proper structural and nonstructural Best Management Practices (BMPs) are included in compliance with the Alabama BMP Manual as required by Part II.A.9.a of the Permit. There was no specific checklist used as part of the site plan review process. The files reviewed only showed memorandums of approval by ES or minor comments on the BMPs. Construction is not allowed to commence until DDS has issued a Building Permit to the developer after obtaining all plan approvals. The County does not have a way of tracking how many sites are active in the MS4 area as DDS accepts applications for all of Shelby County and some of the co-permittees, except the ones below, and tracks them on CAPTURE, a building permit database. The Cities of Alabaster, Helena, and Pelham, Shelby County co-permittees, implement their own permitting and site plan review process. These programs were not reviewed as part of the Audit.

Site Inspections and Enforcement

Generally, the County only inspects construction sites in response to complaints or if concerns are noted when a DDS staff person conducts their building inspections for sites below one (1) acre. There are approximately eleven (11) building inspectors from DDS that look at erosion and sediment control issues along with their normal inspection duties such as mechanical, framing, and electrical oversight. The building inspectors are not formally trained in erosion and sediment control issues. The building inspectors notify Mr. Charles L. Wright, Jr., with DDS, of the findings for follow-up and the complaint is entered in the CAPTURE database. The County's legal authority to inspect and regulate construction sites is provided respectively in Shelby County Ordinance No. 98-09-28-8, Sections 01-020 and Sections 01-049 through 01-053. The ordinance gives the ability to issue written Notices of Violation (NOVs) and civil penalties.

Mr. Wright, Land Development Inspector with DDS, also conducts inspections based on complaints and does follow-up on any findings referred from the DDS building inspectors. There are no routine inspections. Messrs. Robert Kelley and Chad Scroggins with ES also conduct construction inspections when necessary. Messrs. Kelley, Scroggins, and Wright are formally trained in erosion and sediment control. There are only written records for inspections conducted that lead to a Permit Hold or Stop Work Order. No records are kept of inspections conducted if no action is taken. Some of these inspection records/reports are maintained at the ES office and others at the DDS office. During the Audit, inspection files were reviewed covering 2006-2008. The ES office did not have any record of inspections conducted in 2008. The inspection files reviewed were mostly for sites under one (1) acre and contained information about BMP deficiencies, photos, facility contact information, and corrective actions required, if applicable. There is no consolidated database to track enforcement actions and inspection activities. During the Audit, EPA observed inspector Charles L. Wright, Jr., conduct inspections of two (2) sites, Regent Park and Belvedere Cove, both residential subdivisions. The

inspector drove EPA into the sites and noted a few deficiencies but did not leave the car. Mr. Wright did note instances where there was a need for proper inlet protection and stabilization at both sites. EPA noticed instances of sediment tracking and the need for individual lot protection. No formal inspection was conducted with a construction checklist nor were photos taken. EPA asked Mr. Wright to pull over at Regent Park and explain what he would do as part of a normal inspection. He proceeded to explain that he would typically look at the lowest point on-site and track sediment back to its origin and document if there were any impacts from failing BMPs. EPA explained to Mr. Wright what EPA would look for during a typical construction stormwater inspection such as BMP maintenance, inspection report review, and plan reviews. No notes were taken at the time of the inspection.

Required: The Construction Site Runoff Program shall include inspection of construction site and enforcement of control measures in accordance with Part II.A.9.b of the Permit. The current inspection program fails to meet the MEP standard of the Permit as some level of systematic inspection activity is necessary to meet an MEP standard that should extend beyond sites below one acre. The County is in violation of Part II.E.1 of the Permit which requires the County to have legal authority to “control the contribution of pollutants to the MS4 by stormwater discharges associated with industrial activity and the quality of stormwater discharged from sites of industrial activity.”

Recommendations: In order to improve the inspection portion of the Construction Site Management Program, the following recommendations are suggested: (1) create standard operating procedures (SOPs) for conducting construction inspections and escalating enforcement actions; (2) add a “Records Review” portion to the construction inspection checklist; (3) decide on a procedure to approve minor modifications to BMP Plans; (4) develop an inspection schedule on a rotating basis, at least, quarterly; and (5) provide more training for inspectors.

Staff Training

The ES staff and Mr. Charles L. Wright, Jr. have attended formal construction site inspector training and provided certifications to EPA as proof. The DDS building inspectors have not received either formal training or in-house training regarding sediment and erosion controls. The County does not provide construction stormwater education and training to construction site operators as required by the Permit.

Required: The Construction Site Runoff Program shall include appropriate education and training measures for construction site operators in accordance with Part II.A.9.c of the Permit. Failing to provide the building inspectors construction site inspector training fails to meet the MEP standard for controlling pollution from construction sites.

Recommendations: The County should ensure that all staff and construction site operators assigned to public construction projects be required to attend formal construction inspector stormwater training.

XI. Public Education

ES Public Education (PE) program consists of a coordinated effort and partnerships with the State, and County agencies, and other civic organizations to encourage public participation, and implement educational programs with the overall goal to reduce pollution entering into the MS4. Although ES did provide evidence showing the amounts of material distributed to the population, there were no measures in place to determine the program's efficiency or percentage of residents impacted by their efforts. ES provided the Audit Team with a variety of pamphlets, brochures, public announcements, a Water Resource DVD, and a storm drain marker as examples of the educational material that is distributed County-wide to each municipality, the County Development Services, the Board of Education, and civic groups requesting information. ES also discussed their relationship with other agencies and their roles with public promotion, publication, and facilitation of the proper use and disposal of hazardous household waste, used oil, pesticides, and issues of illicit discharges deposited into the MS4. ES provided a pamphlet that describes the management and disposal options available to the public for household hazardous wastes which is distributed to all drivers of private vehicles visiting the Shelby County Landfill as a part of their Landfill Program. Each year the public is allowed to dump household or hazardous wastes for free. ES also developed a pamphlet that educates the public about the proper management and disposal of the used oil. EPA also received and reviewed an educational DVD, "The Shelby County Storm Water and Water Resource Video", that gives an overview of the County's stormwater quality. Based on information provided in the 2008 Annual Report, eighty-five (85) DVDs were distributed to elected officials and community leaders. ES also provided an example of a colorful stormwater drain marker that comes with general information about stormwater pollution prevention and installation instructions. ES distributes and installs the markers throughout the County through its partnership with litter control, interested members of homeowner associations, the Girl Scouts, and other civic organizations. According to the 2008 Annual Report, 120 storm drains markers were installed from October 1, 2007, through September 30, 2008. ES representatives indicated that a hotline had been established for public reporting of suspected illicit discharges and improper disposal and to provide the public with general information. This hotline was advertised through the local media and through the distributed educational material.

Mr. Chad Scroggins also explained the Adopt-A-Road Program where participating civic organizations can post a sign on the street that they adopted for clean up. ACAI is responsible for administering and enforcing the 1940 Professional Service Law, the 1971 Alabama Pesticide Law, and the Customs Pesticides Applicator Law. These laws regulate the sale, distribution, transportation, application, and applicator certification of pesticides within the State of Alabama. Part II. J. 4 of the Storm Water Management Section, of the SWMP indicates that the Auburn Exchange Services,

Extension Service Office (ESO), located in the Shelby County, Columbiana Branch Office, provides the general public with educational program materials and brochures addressing the proper use of chemicals. The materials are located at the ESO and staff is available to provide individual assistance. County personnel in other departments direct inquiries to ESO. Stormwater education is also provided to 1,085 fourth graders in the County's Annual Storm Water Festival that is held in December. Although the Annual Report highlights a few accomplishments such as the number of stormwater drainage markers installed and the number of DVDs distributed, there was no narrative in the Annual Report discussing the overall progress or success of the program. In response to the follow-up questions forwarded to ES by EPA, Mr. Scroggins indicated that ES does keep a record of the educational material that is distributed throughout the County. However, the program did not summarize the number of calls to the hotline or the number of streets that have been adopted by the public. There was no discussion of an educational program specific to illicit discharges, other than what was distributed during annual festivals and DVDs. The County did not identify any illicit discharges from their dry weather screening program in their 2005-2008 Annual Reports. ES indicated in the 2008 Annual Report that weaknesses of the public education program are the lack of training for in-house staff and their reliance on partnerships with other agencies to adequately implement their MS4 program.

Required: Part V.B.3.a (8) and b(2) of the Permit requires that all appropriate yearly compliance activities, and accomplishments should be quantified and summarized in the summary table of the Annual Report.

Recommendations: Conduct MS4 training and create an agreement between ES, ESO and ACAI that focuses on the roles and responsibilities of their respective Departments that articulates how they are integrated into the goals and objective of the PE program. ESO and ACAI should track and submit to ES all quantifiable and related program data to assist ES with compliance with Part V.B.3a (8) and Part V.B.3b (2) of the Permit. ES should conduct an overall assessment and evaluation of there PE program and make the necessary adjustments to ensure compliance with the Permit and reduction of pollution entering into the MS4 to the MEP.

XII. Monitoring Program

Shelby County conducts wet-weather monitoring at five (5) representative outfalls. These five (5) outfalls represent different land uses (low density residential, medium density residential, high density residential, commercial and light industrial). Heavy industrial site monitoring was removed from the Permit in 1998, as noted in the Annual Report. However, the MS4 Permit issued on October 12, 2001, still has the heavy industrial monitoring requirement in Attachment IV for two (2) locations in the Buck Creek Basin. Please provide justification and documentation for removing the heavy industrial monitoring requirement. Each of the outfalls is sampled four (4) times per year during the first (1st) year and once during the following years of the Permit. Sampling results are grouped into four (4) seasons for event mean concentration (EMC). The EMC data are used to calculate the seasonal pollutant loads for each major outfall by

utilizing the simple method. Wet weather monitoring results in Appendix A of the 2008 Annual Report was missing results for Total Phosphorus (PO₄), Total Kjeldahl Nitrogen (TKN), Ammonia Nitrogen (NH₃-N), Dissolved Phosphorus, and E. Coli. Many of these missing parameters occurred in the 2006 and 2007 sample years in all five (5) representative outfall sample locations. For some representative outfall samples, the period between 2006 and 2007 falls within the first (1st) year Permit cycle. In this case, four (4) sample events per year are needed per the Attachment II Permit condition.

Required: For the 2008 sample year, (permit year two [2], as noted in the 2008 MS4 Annual Report) only one (1) sample location (low density residential dated March 19, 2008) has any monitoring results. There was no annual monitoring conducted in 2008 for medium density residential, high density residential, light industrial and commercial sampling locations. As required by Attachments II and IV of the Permit, Shelby County needs to adhere to the monitoring schedule of once per year in years two (2) to five (5) of the permit cycle for medium density residential, high density residential, light industrial and commercial sampling locations. Also, please provide justification and documentation for deletion of heavy industrial monitoring in Attachment IV of the permit.

One of the purposes of the monitoring program was to provide the data necessary to assess the effectiveness and adequacy of the stormwater program elements as implemented by Shelby County. In Appendix A of the 2008 Annual Report, there were monitoring results and a graphical representation of the sampling data over the years. There were no discussions regarding trends, effectiveness or the adequacy of Shelby County's MS4 program. For example, TKN data for light industrial facilities has been increasing for the past three (3) years with no explanation provided or any discussion of possible ways to identify causes and reverse this trend.

A review of the laboratory bench sheet showed that NA₂SO₄ was added as a preservative for Oil and Grease (O&G) samples. The proper preservation technique for O&G is H₂SO₄ instead of NA₂SO₄. The standard conditions in Part IV.P of the Permit required that monitoring for oil and grease must be conducted according to test procedures approved under 40 C.F.R. Part 136.

pH analyses were conducted in the contract laboratory beyond the required holding time. The maximum holding time for pH analysis is fifteen (15) minutes or the sample must be analyzed immediately in the field. The standard conditions in Part IV.P of the Permit required that monitoring for pH must be conducted according to test procedures approved under 40 C.F.R. Part 136.

Recommendation: Instead of making a general statement that the sampling results were consistent with past sampling results, Shelby County should try to correlate the sampling data with an assessment of the effectiveness and adequacy of its stormwater program elements. Past sampling results should be evaluated for trends and seasonal variation to determine if water quality has been improved over time.

XIII. MS4 Jurisdiction

During the Audit, EPA noted that the County MS4 area map did not include all of Shelby County land area. Therefore, Shelby County does not consider all of the County to be covered under the NPDES Permit for its MS4. The main area covered by the MS4 falls along a portion of the Cahaba River which flows through Shelby County. Although some of the MS4 activities and programs may not be applicable to all areas of Shelby County due to land uses, Shelby County is required to have permit coverage for its entire MS4 system; and by not implementing programs throughout the County it is either not implementing a compliant MS4 program under a permit that covers its whole system, or it is discharging from other portions of its MS4 without a permit. The MS4 includes all areas where the MS4 system extends within the County boundary and the SWMP should address all of those areas whether or not they are part of the current MS4 area map.

Municipal Separate Storm Sewer System (MS4) 308 Review
NPDES Permit Number: ALS000003
Alabama State Parks Division, Cities of Alabaster, Helena, Indian Springs,
Moody, and Pelham, Alabama

The U.S. Environmental Protection Agency (EPA), Region 4 conducted a Municipal Separate Storm Water Sewer System (MS4) Audit during the period January 12-14, 2009, of the Shelby County (County) MS4. As a result of this Audit of the County's MS4, EPA sent a Section 308 Information Request (308 Letter) pursuant to Section 308 of the Clean Water Act to the County's Co-Permittees: Alabama State Parks Division (Parks), Alabama Department of Transportation (ALDOT), and the Cities of Alabaster, Helena, Indian Springs, Moody, and Pelham. The 308 Letter was dated February 12, 2009, and requested each of the Co-Permittees to provide specific information regarding their MS4 Programs authorized under the National Pollutant Discharge Elimination System (NPDES) Permit No. ALS000003 (Permit). The Permit became effective November 1, 2001, and expired on October 31, 2006. The renewal application was submitted as a part of the Year Four Annual Report and the Permit was continued in force until such time as a renewal Permit is issued. Under the Permit, the Co-Permittees are required to implement the components of a Storm Water Management Program (SWMP) developed in accordance with the Permit and applicable stormwater regulations. The purpose in conducting the Audit and the 308 Letter was to assess compliance with the Permit, the SWMP, and the Clean Water Act Stormwater Regulations found at 40 Code of Federal Regulations (C.F.R.) § 122.26.

Most of the information provided for the Co-Permittees was sent, with their consent, by the County; some additional information was provided by each of the Co-Permittees. In addition, the County also provided Supplemental Information to its 2008 Annual Report. ALDOT provided a separate response; EPA's review will be in a separate report. The 308 Letter review will address the following: Annual Report; SWMP Administration; Structural Controls and Stormwater Collection System Operation; Areas of New Development and Significant Redevelopment; Roadways; Flood Control Projects; Pesticides, Herbicides and Fertilizers Application; Illicit Discharge Detection and Elimination Program; Spill Prevention and Response; Industrial, Commercial, High Risk, and Municipally-Owned Industrial Runoff; Construction Site Runoff Program; Public Education and Outreach Programs; and Monitoring.

I. Annual Report

The County has been submitting to ADEM, the Annual Reports required by the expired administratively continued Permit. The 308 Letter requested a copy of the current operating NPDES Permit; a Draft Permit was provided in the Annual Report and in the 308 Letter Response. This Draft Permit was never issued as a final document by ADEM and is not the effective Permit. Operations by the Co-Permittees under this Draft Permit may have resulted in some misconceptions and inappropriate implementation of MS4 Program requirements. The current and effective NPDES Permit is being provided as an attachment to this document.

The Annual Report is required to present the strengths, weaknesses, and progression of the MS4 Program for each of the Permittees. The Annual Report provided to EPA failed to provide a clear picture of the state of the MS4 Program for each of the Co-Permittees. The Permit also requires specific information to aid in evaluating each of the MS4 Programs. Part V.B of the Permit requires each Permittee to contribute to the preparation of the Annual Report. This Part also requires each Permittee to sign and certify the Annual Report and include a statement or resolution that the Permittee's governing body (or representative) has reviewed or been apprised of its contents. Part V.B.3.a and b of the Permit requires a Summary Table of appropriate SWMP yearly activities and accomplishments. Part V.B.4.b of the Permit requires a narrative section for discuss of each of the Permittee's activities concerning the MS4 Program by element. Part V.6 of the Permit requires a complete fiscal analysis for each Permittee's MS4 Program implementation, both for the past calendar year and the next. This information was not provided in either the 2007 or 2008 Annual Report.

Required: The Co-Permittees must provide specific information related to the MS4 Program of each of their domains as required by Part V of the Permit. It is imperative that each of the MS4 participants become aware of the correct Permit and its requirements. Each Co-Permittee must ensure that the Annual Reports are complete and report all components required by the Permit and the SWMP. Each Co-Permittee should become more involved in the Annual Report preparation.

II. SWMP Administration

The SWMP was provided in the 2008 Annual Report developed by the County. The SWMP contains some descriptions of MS4 Programs but lacks clear, measurable goals or environmental indicators to reach reduction of pollutants to the Maximum Extent Practicable (MEP). End dates for accomplishment of stormwater related activities are not provided nor are specific requirements for each of the Co-Permittees. There is no indication in the SWMP, which has not been revised since 2002, that the Co-Permittees acknowledge a commitment to SWMP implementation.

Part II.D of the Permit states that the SWMP shall clearly define the roles and responsibilities of each Permittee. Parts II.D.4 and 5 require an interjurisdictional agreement or contract delineating responsibility for SWMP implementation, if such implementation is shared by another party. Neither the SWMP nor the Annual Report contain such agreements.

Required: To comply with Part II.D of the Permit, each Co-Permittee must acknowledge its Permit requirements and SWMP implementation requirements. The SWMP must be revised to include the roles and responsibilities of each of the Co-Permittees. If interjurisdictional agreements or contracts are necessary, then these documents should be executed.

Recommendation: The SWMP should be re-evaluated to develop quantitative and qualitative goals and measures for each of the Co-Permittee's MS4 Programs. The SWMP should be reviewed each year and modified to include growth and changes in the stormwater program.

III. Structural Controls and Storm Water Collection System

The Cities of Helena and Indian Springs provided information regarding structural controls owned by them in their 308 Letter Response. Both Cities rely upon the County for maintenance and repair of their structures. However, no interjurisdictional agreement or contract was provided regarding an agreement for maintenance and repair of structural controls. If either City is going to provide inspection and/or maintenance of their own structures, it will be necessary to develop inspection and maintenance operating procedures to ensure a consistent approach and ensure water quality is maintained.

Required: Each Co-Permittee should ensure compliance with Part II.A.1 of the Permit, which requires the MS4 and any stormwater structural control to be operated in a manner to reduce the discharge of pollutants to MEP. Further if another entity is to perform these functions, ensure that the proper interjurisdictional agreement or contract is in place.

Recommendations: Ensure that standard operating procedures are developed for inspections/corrective actions and that personnel are trained to ensure water quality integrity is maintained.

IV. New Development and Regional Master Planning

Part II.A.2 of the Permit requires a comprehensive master planning process, or equivalent, to develop, implement, and enforce controls to minimize the discharge of pollutants from areas of new development and significant re-development after construction is completed. The Cities of Alabaster, Helena, and Pelham provided a master plan. The City of Moody and the Parks stated a master plan was under development. No information was provided by other Co-Permittees.

Required: Each Co-Permittee who has not done so shall develop a master plan or its equivalent in accordance with Part II.A.2 of the Permit.

V. Roadways

The Permit, in Part II.A.3, requires that public streets, roads, and highways should be operated and maintained to minimize discharge of pollutants, including those related to deicing or sanding activities. The only information provided in the 308 Letter Response and Annual Report is related to street sweeping and trash pickup. Information regarding deicing and sanding activities was not provided; nor was information regarding controls on road building projects.

Required: Part II.A.3 requires a program to minimize discharges from public streets, roads and highways. Each Co-Permittee must develop such a program or if participating with another entity, provide an interjurisdictional agreement or contract.

VI. Pesticides, Herbicides, and Fertilizer (PHF) Application

Co-Permittees stated that they do not store PHFs, except for the Parks, and refer to the 2008 Annual Report. Part II.10.c of the Permit requires a program to publicize the proper use, application and disposal by the public and commercial and private applicators and distributors of PHFs. The Annual Report states that the County Extension Service provides this information. No signed agreement with the Extension Service has been provided. In addition, it is unclear how each of the Co-Permittees makes this information available to the public.

Required: To comply with Part II.A.5 of the Permit, each Co-Permittee must have a PHF program or be a party to a signed agreement with the County Extension Service and provide a means for transmitting Extensive Service information to the public. Parks must provide additional information regarding controls and storing of PHFs and its application.

VII. Illicit Discharges and Improper Disposal

Each of the Co-Permittees relies upon the County to manage the illicit discharge and improper disposal program. A signed agreement between the County and each Co-Permittee must be executed to meet the requirements of the Permit. It should be noted that the Permit under Part II.A.6.b requires each Permittee to prevent unpermitted discharges from sanitary sewers to the MS4 and shall limit the infiltration of seepage from sanitary sewers. The *Storm Water Ordinance* adopted by most of the Co-Permittees gives the ability to meet this requirement.

The 2008 Annual Report and 308 Letter Responses state that ADEM identifies non-storm water discharges and that the Alabama Department of Public Health is responsible for leaking septic systems or tanks that cause seepage to enter the MS4. These tasks are also the responsibility of each of the Co-Permittees and are required by the Permit.

Part II.A.6.of the Permit has a specific requirement for setting a compliance schedule in a situation where elimination of illicit discharges within ten (10) working days is not possible; each Co-Permittee must revise their Ordinance or develop an Ordinance containing this requirement.

Required: Each Co-Permittee shall ensure that compliance with Part II.A.6 of the Permit is obtained and that legal authorities are in compliance with Part II.E of the Permit. If interjurisdictional agreements are appropriate, then those should be instituted as soon as possible.

Recommendations: Ensure that employees are aware of how to identify and report illicit discharges to the MS4.

VIII. Spill Prevention and Response

The Co-Permittees have indicated that they rely on the County's Emergency Management Agency (EMA) to respond to hazardous material spills. However, Part II.A.7 of the Permit requiring a program to prevent, contain and respond to spills not only applies to hazardous material spills but to all spills; i.e., sewage, paint, etc. In addition, there is no interjurisdictional agreement with the County for hazardous material spill response and clean-up. There is also no method in place to track spills into the MS4s. Copies of the MS4 maps have not been provided to EMA and there are no procedures in place for EMA to notify the MS4 that a spill has occurred.

Required: Compliance with Part II.A.7 of the Permit must be obtained by all Co-Permittees. An interjurisdictional agreement must be implemented; maps of the MS4s and procedures for notification must be developed; and operating procedures for notification and clean-up of other than hazardous spills must be developed.

Recommendations: The County should coordinate the Spill Prevention and Response Program with all of the Co-Permittees. A tracking system for all types of spills should be developed.

IX. Industrial and High Risk Runoff

To comply with Part II.A.8 of the Permit, Shelby County conducts industrial inspections for all industrial facilities not permitted by ADEM for all of the Co-Permittees. There is no interjurisdictional agreement in place to allow the County to conduct the inspections for the Co-Permittees. Each Co-Permittee, in addition, must have the ability to pursue enforcement against industrial and high risk facilities. Also, each Co-Permittee must identify its high risk and municipally-operated facilities and have a method for adding new businesses to its database. Because each Co-Permittee has been relying upon the County and ADEM to implement this program, information regarding high-risk and municipal facilities is not available. It should be noted by the Co-Permittees that the program operated by the County is not sufficient in that it does not inspect those facilities permitted by ADEM.

Required: The Co-Permittees must ensure that compliance with Part II.A.8 is met, whether through the use of interjurisdictional agreements or through their own program.

Recommendation: The Co-Permittees should ensure that if another party is operating a program for them, that compliance with the Permit is being achieved.

X. Construction Site Runoff Program

Part II.B.9 of the Permit requires a program to reduce the discharge of pollutants from construction sites. The response to the Section 308 Letter states that ADEM is responsible for construction sites greater than one (1) acre. The Permit does not make this distinction; a program must be in place for all construction sites one (1) acre or greater. The Permittees must require appropriate structural and nonstructural best management practices; conduct inspections; pursue appropriate enforcement; conduct training for construction site operators; and notify building permit applicants of their responsibilities under the construction NPDES permit. The legal authority must be in place to allow for a construction program incorporating the Permit requirements. If a portion of the program is being operated by another entity, then there must be an interjurisdictional agreement or contract.

Required: The Construction Site Runoff Program shall include the components listed in Part II.A.9.a-d of the Permit. Co-Permittees must ensure legal authority is in place to meet the intent of the Permit.

Recommendations: Ensure that all staff and construction site operators assigned to are required to attend formal construction inspector storm water training.

XI. Public Education

A good deal of the Public Education Program for each of the Co-Permittees is accomplished by the County. There is no written agreement among all the parties regarding the operation of the Public Education Program. Part II.A.10 of the Permit requires, at a minimum, an educational program for illicit discharges, management and disposal of used oil and household hazardous wastes, and the proper use, application, and disposal of pesticides, herbicides, and fertilizers.

Required: Each Co-Permittee must ensure that compliance with Part II.A.10 of the Permit is met either through a there own Program or through an agreement with another entity.

XII. Monitoring Program

Responses to the Section 308 Letter state that the Monitoring Program is being implemented by the County. A written agreement among the Co-Permittees needs to be finalized to meet the requirements of Part II.B.11 of the Permit.

Required: Ensure that Part II.B.11 of the Permit is being complied with for all Co-Permittees.

Municipal Separate Storm Sewer System (MS4) 308 Review
NPDES Permit Number: ALS000003
Alabama Department of Transportation

The U.S. Environmental Protection Agency (EPA), Region 4 conducted a Municipal Separate Storm Water Sewer System (MS4) Audit during the period January 12-14, 2009, of the Shelby County (County) MS4. As a result of this Audit, EPA sent a Section 308 Information Request (308 Letter) pursuant to Section 308 of the Clean Water Act to the County's Co-Permittees. The 308 Letter was dated February 12, 2009, and requested each Co-Permittee to provide specific information regarding their MS4 Programs authorized under the National Pollutant Discharge Elimination System (NPDES) Permit No. ALS000003 (Permit). The Permit became effective November 1, 2001, and expired on October 31, 2006. The renewal application was submitted as a part of the Year Four Annual Report and the Permit was continued in force until such time as a renewal Permit is issued. Under the Permit, the Co-Permittees are required to implement the components of a Storm Water Management Program (SWMP) developed in accordance with the Permit and applicable stormwater regulations. The purpose in conducting the Audit and the 308 Letter was to assess compliance with the Permit, the SWMP, and the Clean Water Act Stormwater Regulations found at 40 Code of Federal Regulations § 122.26.

ALDOT submitted a separate 308 Letter Response from the other Co-Permittees; this 308 Letter Review will address ALDOT's submission. The following components are addressed: Annual Report; SWMP Administration; Structural Controls and Storm Water Collection System Operation; Roadways; Pesticides, Herbicides and Fertilizers Application; Spill Prevention and Response; Construction Site Runoff Program; and Monitoring.

I. Annual Report

The Permit requires the submission of an Annual Report yearly by the Lead Permittee, Shelby County. The Annual Report is required to present the strengths, weaknesses, and progression of the MS4 Program for each of the Co-Permittees. ALDOT provided their information for the 2007 and 2008 Annual Reports to ADEM directly. ALDOT information was not incorporated into the Annual Reports provided to ADEM by the County. Part V.B of the Permit requires each Permittee to contribute to the preparation of the Annual Report. This Part also requires each Permittee to sign and certify the Annual Report and include a statement or resolution that the Permittee's governing body (or representative) has reviewed or been apprised of its contents.

Various components reviewed in ALDOT's Annual Report will be discussed later in this document.

Required: ALDOT must provide specific information related to its MS4 Program to the County, as the Lead Permittee, for incorporation into the Annual Report

submitted to ADEM, and provide a review of the Annual Report, as required by Part V of the Permit.

Recommendation: Communicate with the County concerning the Permit and Annual Reporting requirements.

II. SWMP Administration

The SWMP provided in the 2008 Annual Report developed by the County is not the SWMP that was provided by ALDOT. The ALDOT SWMP is dated May 1994 and contains some descriptions of MS4 Programs but lacks clear, measurable goals or environmental indicators to reach reduction of pollutants to the Maximum Extent Practicable (MEP). End dates for accomplishment of stormwater related activities are not provided.

Part II.D of the Permit states that the SWMP shall clearly define the roles and responsibilities of each Permittee. Part II.D.4 and 5 requires an interjurisdictional agreement or contract delineating responsibility for SWMP implementation if such implementation is shared by another party.

Required: The ALDOT SWMP should be updated to reflect present day operations. It should be revised with clear measurable goals and environmental indicators in accordance with Part II.D of the Permit. If interjurisdictional agreements or contracts are necessary, these should be entered into and attached to the SWMP and the Annual Report. ALDOT's SWMP should be incorporated into the Annual Report provided by the Lead Permittee to ADEM.

Recommendation: The SWMP should be reviewed each year and modified to include growth and changes in the stormwater program.

III. Structural Controls and Storm Water Collection System

ALDOT maintains many ditches, ponds, etc. which collect and discharge stormwater. The 308 Letter Response provided many manuals and maps outlining ALDOT's collection system. The 2008 Annual Report for ALDOT states that there is a regular maintenance and inspection schedule but does not provide specific detailed information.

Required: Part II.A.1 of the Permit, which requires the MS4 and any stormwater structural control to be operated in a manner to reduce the discharge of pollutants to MEP. The Annual Report should provide specifics regarding inspection and maintenance activities for the Shelby County area.

Recommendations: The Annual Report should detail how inspections are prioritized, the number and types of inspections conducted, the results of those inspections, and the number and types of maintenance performed.

IV. Roadways

The Permit, in Part II.A.3, requires that public streets, roads, and highways should be operated and maintained to minimize the discharge of pollutants, including those related to deicing or sanding activities. Response to the 308 Letter and the information provided in the Annual Report, state that litter control and roadway cleaning is provided. Details regarding these activities, the amount of litter and/or trash collected and disposed of is not provided. Information regarding deicing and sanding activities was not provided.

Required: To achieve compliance with Part II.A.3 of the Permit, additional information should be submitted detailing the program in place by ALDOT and providing specific information for the Shelby County area.

V. Pesticides, Herbicides, and Fertilizer (PHF) Application

The Section 308 Response provided information regarding the ALDOT PHF Program. It should be noted that the 2008 Annual Report should include this information as well as the pounds of PHFs used in Shelby County and where, specifically, those PHFs were applied.

Required: To comply with Part II.A.5 of the Permit, details regarding the PHF program operated by ALDOT and specifically within Shelby County must be provided in the Annual Report

VI. Spill Prevention and Response

ALDOT provided a good deal of information related to spill incidents and reporting for ALDOT as a whole. Specifics concerning the Shelby County MS4 were not provided. Part II.A.7 the Permit, requires a program to prevent, contain and respond to spills; this applies not only to hazardous material spills but to all spills; i.e., sewage, paint, etc. Information specifically related to the Shelby County area was not provided. This information was also not addressed in the Annual Report.

Required: Compliance with Part II.A.7 of the Permit must be obtained and demonstrated in the SWMP and Annual Report.

Recommendations: Coordination with the Shelby County and the other Co-Permittees may be necessary. A copy of the collection system map for ALDOT should be provided to Shelby County's Emergency Management Agency, as they are the first responders for the County.

X. Construction Site Runoff Program

Information provided involved construction site design and inspections for all of ALDOT. The SWMP and Annual Report state that there was a program in place but does not provide any information specific to the Shelby County area.

Required: ALDOT should include in its SWMP and Annual Report information concerning construction projects within the Shelby County MS4 area.

Recommendations: Although ALDOT obtains an ADEM Permit for its construction sites, coordination with Shelby County is recommended as discharges from the DOT may affect the County.

XII. Monitoring Program

ALDOT provided maps and other documentation related to outfalls within its jurisdiction. However, no monitoring data was provided in its 308 Letter Response or in the Annual Report. ALDOT has stated that divisional and district personnel will assist in monitoring in the future and Standard Operating Procedures (SOPs) are being developed.

Required: Develop a schedule and SOP for the required monitoring. Provide this information to the Lead Permittee (Shelby County) for inclusion in the Annual Report.

Recommendation: If necessary, develop and execute an agreement with a third party to ensure that monitoring is conducted in accordance with the Permit. Coordinate monitoring the Shelby County to ensure there is no duplication of effort.

XIII. Summary

ALDOT is not a traditional MS4 Co-Permittee, but must coordinate its actions with the Lead Permittee, Shelby County. Discussions should be held with the County to determine what information should be incorporated in the SWMP and Annual Report.

XIII. Summary

The Co-Permittees have traditionally relied upon Shelby County to assist in the operation of their stormwater programs. There may have been confusion over the operation of the Construction and Industrial and High Risk Programs because the incorrect NPDES MS4 Permit was being utilized by the Co-Permittees. Shelby County may operate all or part of stormwater programs for other entities, but there must be a signed agreement in place and included in the SWMP and the Annual Report, as required by Part I.C.1, Part I.C.2, and Part II.D.4 and 5 of the Permit. Legal authority to operate all of the programs required by the Permit and the stormwater regulations must be established as required by Part II.E of the Permit. Co-Permittees must take a more active role in the preparation of the Annual Report. Those responsibilities are outlined in Part V.B of the Permit. Signatory requirements are stated in Part V.C and Part IV.H of the Permit.

