

# Storm Water Management Authority and Jefferson County Department of Health

## Storm Water Management Program Plan (SWMP)

Date to be determined for release

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**Jefferson County, Alabama**  
Cities of Storm Water Management Authority

**Stormwater Management Program (SWMP) Plan 2010**

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## Introduction and Background

In 2001, the members of Storm Water Management Authority were issued a National Pollutant Discharge Elimination System (NPDES) Permit No. ALS000001 for the greater Birmingham Area MS4. These permits are handed down through the Environmental Protection Agency to the Alabama Department of Environmental Management (ADEM) to address stormwater quality issues. In Alabama the permit is based on population with the current stormwater permit being handled by Storm Water Management Authority being of the Phase 1 nature (large municipal area).

The permit allows for stormwater from the Storm Water Management Authority municipalities to discharge to the rivers and streams of the State of Alabama if certain stormwater criteria and programs are in place to protect water quality. These programs are intended to decrease the municipalities' stormwater pollution to the Maximum Extent Practicable (MEP). The permit requires that the cities of Storm Water Management Authority:

Adamsville	Brookside	Brighton
Center Point	Clay	Fairfield
Gardendale	Homewood	Hueytown
Irondale	Lipscomb	Leeds
Maytown	Midfield	Mulga
Mountain Brook	Pinson	Pleasant Grove
Tarrant	Trussville	Vestavia Hills

develop a Stormwater Management Program (SWMP) Plan. The programs must be phased in over a 5 year period from the effective date of the permit, October 15, 2001. The stormwater NPDES permit for Storm Water Management Authority expired in 2006; however the program is operating under the 2001 Permit and is under a constant evolutionary process to implement programs that help to effectively meet the EPA requirements of the Permit. The SWMP must include the following components;

1. Structural Controls and Storm Water Collection System Operations
2. Areas of New Development and Significant Redevelopment
3. Roadways
4. Flood Control Projects
5. Pesticide, Herbicide and Fertilizer Application
6. Illicit Discharge and Improper Disposal Detection
7. Stormwater Dry and Wet Weather Monitoring Programs
8. Spill Prevention and Response
9. Industrial and High Risk Runoff Program
10. Construction Erosion and Sedimentation Control Program
11. Public Education and Outreach

Additionally an SWMP must be formulated by the cities to be updated annually beginning in January 2011. The eleven requirements will be discussed individually as

well as how Storm Water Management Authority and JCDH Plan to implement programs to deal with each issue.

## **Component 1: Structural Controls and Stormwater Collection System Operations**

Storm Water Management Authority and JCDH are developing a system to help detect structural control defects and how to better analyze the stormwater collection system for each city. This will allow for a better city and overall watershed approach for problems such as flooding, scouring, and various other problems that can be caused by inadequate maintenance of storm drain systems.

### ***Permit Requirements***

Part II of the NPDES Permit calls for structural controls and stormwater collection systems to be operated in a manner to reduce the discharge of pollutants to the Maximum Extent Practicable (MEP).

Storm Water Management Authority, JCDH, and the Storm Water Management Authority's cities are in the process of providing an effective structural control and stormwater maintenance system program that will lead to less pollutants coming from the cities' MS4s. The following phased timeline required is:

- 1) By **October 1, 2010** initiate a program to clean stormdrains that are identified as submerged or partially filled with sediment through outfall monitoring activities. This will have to be a cooperative effort between Storm Water Management Authority, JCDH, and the municipalities.
- 2) By **October 1, 2010** initiate a program to clean stormwater detention ponds and track all maintenance duties performed throughout the Permit year.
- 3) By **October 1, 2010** develop SOPs on how to perform all stormwater maintenance activities including proper cleaning and reuse of material.
- 4) By **May 1, 2011** distribute all SOPs and forms to public works employees for field implementation.
- 5) By **May 1, 2012** develop a comprehensive stormwater MS4 map that includes detention ponds, retention ponds, inlets, pipes, and all other stormwater controls in the Storm Water Management Authority cities.
- 6) By **May 1, 2012** develop design booklet for helping design comprehensive stormwater plans specific to Storm Water Management Authority's cities.
- 7) BY **January 1, 2013** use city data to formulate an overall stormwater system rehabilitation schedules and city procedures on rehabilitation.

***Current Activities***

- 1) SOP manual is being developed and in review process for distribution to cities for training.
- 2) Detention pond cleaning form has been developed and training on proper use of forms will begin in an internal training session for city clerks by May 1, 2010.
- 3) Stormwater outfalls are being mapped and recorded to provide the cities information on blockage, submerged outfalls, and other areas of degradation to the stormwater control system.
- 4) The storm drain system is being GPS located to build a comprehensive GIS database on all storm drain systems.

***Planned Activities***

- 1) To implement the requirements in the permit to the Maximum Extent Practicable
- 2) Continue educating public employees and cities on the value of rehabilitation of older areas of the stormwater network.
- 3) Implement a cooperative effort to make sure all structural controls are functioning properly.
- 4) A cooperative effort to identify areas where water quality can be improved by stormwater structural component upgrades.

**Component 2: Areas of New Development and Significant Redevelopment**

Storm Water Management Authority and JCDH have a plan to use building codes, inspectors, and ordinances to promote “greener” development throughout the Storm Water Management Authority area. The goal will be to use “green” development and post construction ordinances to prevent discharge of pollutants from areas of significant re-development. The structural controls will also be kept in mind when re-development is undertaken to examine other alternatives that may reduce pollutant loading from existing systems.

***Permit Requirements***

A comprehensive master planning process 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 must be completed. The goals to reach are for:

- 1) All new development must have limited increases in the discharge of pollutants in storm water as a direct result of the development

- 2) All re-development must try to reduce the discharge of pollutants to the stormwater system to the Maximum Extent Practicable.

The following phased timeline required is:

- 1) By **October 1, 2010** come up with a land usage map that can be analyzed for areas of significant re-development
- 2) By **October 1, 2010** have videos of Low Impact Development (LID) Conference available to the public.
- 3) By **December 1, 2010** develop brochures that show the benefit of “green” development.
- 4) By **December 1, 2010** work with cities to promote “green” ordinances.
- 5) By **July 1, 2011** provide training seminar for engineers on Low Impact Development and “green” alternatives.
- 6) By **October 1, 2011** identify areas where re-development procedures can be most effective to control stormwater pollution.
- 7) By **January 1, 2012** identify communities that could be benefited by retrofits of “green” stormwater controls.
- 8) By **January 1, 2013** develop a Low Impact Development Design Handbook.
- 9) By **January 1, 2013** develop an Engineering Manual with electronic drawings.

### ***Current Activities***

- 1) Hosted Low Impact Development Conference for engineers, city employees, and field staff.
- 2) Organizing internal LID training that will be presented to the cities in CD form for municipal employee training.
- 3) GIS land usage map has been developed and is being revised to show current usage.
- 4) LID brochure is on schedule to be out by December 1, 2010.
- 5) Videos of LID conference online and available to the public through JCDH website.

### ***Planned Activities***

- 1) Coordinate Internal and external training workshop on LID development for 2011.
- 2) Use land-use GIS map to determine areas where pollutants could be minimized by “green” alternatives and better stormwater retrofits.
- 3) Start work on LID handbook and engineering guidance manual.
- 4) Promote “green” alternatives through ordinances in stormwater throughout Jefferson County.

### **Component 3: Roadways**

Storm Water Management Authority and JCDH are building ways to work with cities to develop SOPs and tracking methods for street activities such as sanding or deicing. The removal of pollutants from common road activities is an issue that is best addressed through education of the public works employees on how to store and handle material that could pose a threat to waterways.

#### ***Permit Requirements***

Public streets, roads, and highways shall be operated and maintained in a manner to minimize discharge of pollutants to waterways.

The following phased timeline required is:

- 1) By **October 1, 2010** have an SOP manual that will handle proper storage, use, disposal of both deicing and sanding materials for municipal and Jefferson County employees.
- 2) By **May 1, 2011** initiate program to train municipal employees on procedures.
- 3) By **May 1, 2012** develop tracking software for all street sweeping, deicing and sand material, and pavement patching.
- 4) By **October, 2013** have comprehensive database for tracking all street maintenance and repair activities.

#### ***Current Activities***

- 1) SOP manual is being developed and reviewed for all roadway procedures.
- 2) A city training program is being developed and piloted throughout several cities.
- 3) Tracking forms have been developed to track certain roadway activities

#### ***Planned Activities***

- 1) Develop tracking software that can build a comprehensive database for all Storm Water Management Authority's cities. This will be an online system that can be used at the municipal buildings.
- 2) Develop comprehensive street cleaning plans between cities.
- 3) Develop training videos on JCDH website for city employees on all SOP procedures.

### **Component 4: Flood Control Projects**

Storm Water Management Authority and JCDH use Jefferson County Department of Land Development Flood Control and Mitigation for most flood control issues. The Storm Water Management Authority cities use JCDH and other sources to aid in the



water quality perspective of pollution removal retro-fits to stormwater flood control structures.

### ***Permit Requirements***

Impacts on receiving water quality shall be assessed for all flood management projects. The feasibility of retro-fitting existing structural flood control devices to provide additional pollutant removal from stormwater shall be evaluated.

The following phased timeline required is:

- 1) By **December 1, 2010** have SOPs developed for cleaning detention and retention ponds.
- 2) By **December 1, 2010** distribute tracking sheets for stormwater detention ponds throughout municipalities.
- 3) By **January 1, 2013** incorporate all flood control structures and detention ponds into comprehensive GIS database.
- 4) By **January 1, 2014** have data on pollution loads from all flood control structures.

### ***Current Activities***

- 1) Stormwater flood control structures are currently being added to GIS database through arial photography.
- 2) SOPs and tracking forms are being developed and will be on target date for distribution.

### ***Planned Activities***

- 1) Develop data on pollution loads from all flood control structures.
- 2) Promote ways through manuals, brochures, etc on designs that remove higher pollutant loads than conventional designs.
- 3) Examine areas in cities where stormwater retrofits can help to remove additional pollutant loadings

## **Component 5: Pesticide, Herbicide, and Fertilizer Application**

Storm Water Management Authority and JCDH have started to implement training to both homeowners and municipal employees on the dangers of applying pesticides, herbicides, and fertilizers near the waterways of Jefferson County. This will be a twofold process through both educational material and in-the-field training.

### ***Permit Requirements***

Each permittee shall implement controls to reduce the discharge of pollutants related to the storage and application of pesticides, herbicides, and fertilizers applied, by the permittee's employees or contractors, to public right of ways, parks, and other city



property. Permittee(s) with jurisdiction over lands not directly owned by that entity (e.g. incorporated city) shall implement programs to reduce the discharge of pollutants related to application and distribution of pesticides, herbicides, and fertilizers.

The following phased timeline required is:

- 1) By **October 1, 2010** SOP manual with procedures for both homeowners and municipal employees on application of pesticides, herbicides, and fertilizers.
- 2) By **October 1, 2010** SOP manual with procedures for proper storage of pesticides, herbicides, and fertilizers.
- 3) By **January 1, 2011** have brochure for distribution at various garden and lawn events to the public.
- 4) By **January 1, 2011** have an education video on pesticides, herbicides, and fertilizers for use in training all municipal employees.
- 5) By **January 1, 2012** have trends on what creeks are affected by chemicals from pesticides, herbicides, and fertilizers so as to target education in these areas.

### ***Current Activities***

- 1) SOP manual is currently being reviewed and developed for application and storage procedures of pesticides, herbicides, and fertilizers.
- 2) Brochure is currently being developed for distribution to homeowners and the public.
- 3) Trends are being developed using sampling data but will need further data to build trends that are relevant to JCDH and Storm Water Management Authority's current PHF program.

### ***Planned Activities***

- 1) Develop a video for distribution to Storm Water Management Authority's cities on training for pesticides, herbicides, and fertilizers.
- 2) Build trends in chemicals from pesticides, herbicides, and fertilizers in sampling data.

## **Component 6: Illicit Discharges and Improper Disposal**

The illicit discharge and improper disposal program deployed by Storm Water Management Authority and JCDH is very complex and comprehensive. This document will not try to elaborate on details but will give a brief overview of the strategies used and how they are molded into a larger overall watershed plan.

### ***Permit Requirements***

An illicit discharge program must be organized to detect and eliminate illicit discharges and improper disposal into the storm sewer.

- I. Non-stormwater discharges to the MS4 shall be effectively prohibited. However the permittee may allow, in accordance with 40 CFR 122.26 (d)(2)(iv)(B)(1), certain non-stormwater discharges to the MS4. The Storm Water Management Program shall identify any non-storm water discharges allowed under this paragraph, along with any conditions placed on allowing such discharges to the MS4.
- II. Each permittee shall prevent (or require the operator of the sanitary sewer to eliminate) unpermitted discharges of dry and wet weather overflows from sanitary sewers into the MS4. Each permittee shall limit, to the MEP, the infiltration of seepage from sanitary sewers into the MS4.
- III. A program to locate and eliminate illicit discharges and improper disposal into the MS4 shall be implemented. This program shall include dry weather screening activities to locate portions of the MS4 with suspected illicit discharges and improper disposal. Follow-up activities to eliminate illicit discharges and improper disposal may be prioritized on the basis of magnitude and nature of the suspected discharge; sensitivity of the receiving water; and/or other relevant factors. This program shall establish priorities and schedules for screening the entire MS4 at least per five years. Facility inspections may be carried out in conjunction with other municipal programs (e.g. pretreatment inspections of industrial users, health inspections, fire inspections, etc).
- IV. Each permittee shall require the elimination of illicit discharges as expeditiously as possible and the immediate cessation of improper disposal practices upon identification of responsible parties. Where elimination of an illicit discharge within ten (10) working days is not possible, the permittee shall require an expeditious schedule for removal of the discharge. In the interim, the permittee shall require the operator of the illicit discharge to take all reasonable and prudent measures to minimize the discharge of pollutants to the MS4.

The following phased timeline required is:

- 1) By **October 1, 2010** write SOPs in manual on illicit discharge inspection procedures by JCDH and municipal employees.
- 2) By **October 1, 2010** write SOPs in manual on procedures once an illicit discharge has been discovered and confirmed through sampling.
- 3) By **October 1, 2010** distribute brochure to inform public on how to report illicit discharges to the JCDH Stormwater Hotline at (205)930-1299.
- 4) By **October 1, 2010** develop GIS map of all unsanitary dog yards, septic tank malfunctions, and other JCDH complaints.
- 5) By **January 1, 2011** develop GIS map for all sanitary sewer overflows from database to develop priority areas for education.
- 6) By **January 1, 2011** develop brochure to distribute to public in areas of high priority for sanitary sewer overflows.

- 7) By **May 1, 2012** develop industrial inspection and illicit discharge program to follow up with Alabama Department of Environmental Management (ADEM) on NPDES industrial permitting.
- 8) By **October 1, 2012** develop GIS outfall map for all major waterways in Storm Water Management Authority's cities by using a GPS unit.
- 9) By **October 1, 2012** revise the *Erosion and Sedimentation Control Ordinance* to allow for stronger enforcement, escalation of fines for illicit discharges, and other needs as stated by the Environmental Protection Agency.

#### **Current Activities**

- 1) SOPs are being developed and reviewed for procedures on all steps of illicit discharge detection and elimination.
- 2) Illicit Discharge brochure is being developed for distribution in high priority areas.
- 3) GIS mapping of stormwater outfalls is currently under-way and should be completed by target date.
- 4) Industrial Program ADEM NPDES sites have been GIS mapped and preliminary talks have been held on how to conduct this program in the future.
- 5) Outfalls are currently being monitored for flow for further sampling on an as needed basis.
- 6) GIS map of all JCDH complaints worked in year 2010 that could affect stormwater quality.

#### **Planned Activities**

- 1) High priority areas will be adjusted based on all GIS maps attained by JCDH and Storm Water Management Authority.
- 2) GIS mapping of stormwater outfalls will continue until completion.
- 3) Industrial Program will have all details adjusted as needed by JCDH and Storm Water Management Authority.
- 4) Further Development of SOPs will continue until comprehensive manual has been generated.
- 5) Revisions to Ordinance will be undertaken as needed by Storm Water Management Authority and JCDH.

### **Component 7: Stormwater Dry and Wet Weather Monitoring Programs**

Storm Water Management Authority and JCDH have implemented a dry and wet weathering monitoring program that helps to detect illicit discharges, provide pollutant baselines for the waterways in Storm Water Management Authority's cities, and shows improvements or declines on the waterways listed on the 303(d) impaired list for Alabama.

#### **Permit Requirements**

The following monitoring programs shall be implemented in addition to Component 6:

- I. The Dry Weather Screening Program shall continue ongoing efforts to detect the presence of illicit connections and improper discharges to the MS4. All areas of the MS4 must be screened at least once during the permit term. Screening methodology may be modified based on experience gained during actual field screening activities and need not conform to the protocol at 40 CFR 122.26 (d)(1)(iv)(D). Sample collection and analysis need not conform to the requirements of 40 CFR Part 136.
- II. Wet Weather Screening Program: The permittee(s) shall identify, investigate, and address areas within their jurisdiction that may be contributing excessive levels of pollutants to the MS4. The wet weather screening program:
  - a) Shall screen the MS4 in accordance with the procedures specified in the Storm water Management Program.
  - b) Shall specify the sampling and non-sampling techniques to be used for initial screening and follow-up purposes. Sample collection and analysis need not conform to the requirements of 40 CFR Part 136.
- III. The Industrial and High Risk Runoff Monitoring Program shall include monitoring for pollutants in stormwater discharges to the MS4 from municipal landfills; other treatment, storage, or disposal facilities for municipal waste (e.g. transfer stations, incinerators, etc.); hazardous waste treatment, storage, disposal, and recovery facilities and facilities that are subject to EPCRA Title III, Section 313; and any other industrial or commercial discharge the permittee determines are contributing a substantial pollutant loading to the MS4. The monitoring program shall include the collection of quantitative data on the following constituents.
  - 1) Any pollutants limited in an existing NPDES permit for an identified facility
  - 2) Oil and grease
  - 3) Chemical oxygen demand (COD);
  - 4) pH;
  - 5) biochemical oxygen demand, five day (BOD<sub>5</sub>)
  - 6) total suspended solids (TSS)
  - 7) total phosphorous
  - 8) total Kjeldahl nitrogen (TKN)
  - 9) nitrate plus nitrite nitrogen
  - 10) any other information on discharges required under 40 CFR 122.21 (g)(7)(iii) and (iv)

Data collected by the industrial facility to satisfy the monitoring requirements of an NPDES or State discharge permit may be used to satisfy this requirement. Permittee(s) may require the industrial facility to conduct self-monitoring to satisfy this requirement.

The following phased timeline required is:

- 1) By **October 1, 2010** have conducted all samples as listed in the following table:

**Figure 1: Sampling Sites**

Sampling Procedures	# of sites
Main Channel Samples	29
Tributary Samples	48
Characterization Samples (Existing)	3
Characterization Samples (New)	2

**Figure 2: Samples Taken per Year**

Sampling Procedures	Wet	Dry
Main Channel Samples	1	3
Tributary Samples		2
Characterization Samples (Existing)	1	
Characterization Samples (New)	4	

The total Samples taken will be: **223**

- 2) By **October 1, 2010** have a turbidity sampling program for all 29 main channel sites that will be taken at the first of every month for all 29 sites.
- 3) By **October 1, 2010** develop an SOP manual for sampling procedures for both wet and dry sampling as well as all follow-up procedures.
- 4) By **October 1, 2010** develop a GIS database of all sampling points and implement sampling procedures to detect all water quality data incrementally. 303(d) list streams are also taken into account for their specific pollutant loadings.
- 5) By **May 1, 2011** develop program for analyzing water quality from municipal landfills.
- 6) By **October 1, 2011** develop program that will analyze sampling data from lab reports and show trends in water quality.
- 7) By **May 1, 2012** develop GIS map of priority areas based on water quality trends and already existing 303(d) data.
- 8) By **May 1, 2012** develop industrial inspection and illicit discharge program to follow up with Alabama Department of Environmental Management (ADEM) on NPDES industrial permitting.
- 9) By **October 1, 2013** modify the *Erosion and Sedimentation Control Ordinances* for stronger controls on industrial discharges and procedures.

### **Current Activities**

- 1) Samples are being taken in accordance with (1) above. This sampling regiment may be altered by Storm Water Management Authority and JCDH based on climate, rainfall, or sampling efficiency.



- 2) SOP manual is being drafted that will provide all procedures needed for wet, dry, and industrial sampling.
- 3) Turbidity sampling program started July 1, 2010 and will be taken at the first of every month at all 29 main channel sites.
- 4) GIS database has been constructed to show all sampling sites in relationship to the 303(d) impaired waterways.
- 5) JCDH has written software that will analyze all lab reports and formulate trends on water quality data based on a point or entire watershed basis.
- 6) JCDH is compiling a list of all public and private landfills in order to allow for the (1) closing of unauthorized landfills; or (2) monitor permitted landfills for water quality.
- 7) GIS site map has been constructed to show all NPDES permitted sites for monitoring on a revolving basis.
- 8) The *Erosion and Sedimentation Control Ordinance* is being currently evaluated for needed revisions to the industrial processes as stated by EPA.

### ***Planned Activities***

- 1) Further evaluation of the *Erosion and Sedimentation Control Ordinance* will need to be conducted to strengthen the requirements needed for EPA compliance.
- 2) Develop priority areas based on water quality data.
- 3) Implement inspection procedures and include in SOP manual for all industrial and municipal facilities
- 4) Develop GIS map showing all possible contamination sources for each specific contaminant.

## **Component 8: Spill Prevention and Response**

Storm Water Management Authority and JCDH are in the process of working with local fire departments throughout Jefferson County to aid in obtaining a proper spill response procedure for all agencies. The developing of both an SOP manual and a comprehensive stormwater map that will be useful to keep pollutants from entering the municipality's MS4 will be given to all agencies involved to aid in this endeavor.

### ***Permit Requirements***

A program to prevent, contain, and respond to spills that may discharge into the MS4 shall be implemented. The spill response program may include a combination of spill response actions by the permittee (and/or another public or private entity), and legal requirements for private entities within the permittee's municipal jurisdiction.

The following phased timeline required is:

- 1) By **October 1, 2010** develop SOP for spill prevention.

- 2) By **May 1, 2011** meet with firemen to discuss plans on developing a uniform hazardous spill tracking sheet to distribute throughout Storm Water Management Authority's cities.
- 3) By **October 1, 2013** have comprehensive GIS MS4 map for use by spill responders to assess what inlets require blocking off during spill prevention. This will also aid in where to monitor for pollutants if a spill occurs.

### ***Current Activities***

- 1) SOP manual is being drafted and reviewed for release by target date.
- 2) Spill tracking sheet is currently being developed and will be delivered to fire departments and the Jefferson County Emergency Management Agency for review.
- 3) GIS MS4 map is being developed from aerial photography for each city. (4-21 completed by this method)

### ***Planned Activities***

- 1) Continue GIS MS4 map using aerial photography for all other cities in Storm Water Management Authority.
- 2) Field verify all missing storm drains to make sure storm network is complete for each municipality

## **Component 9: Industrial and High Risk Runoff Program**

Storm Water Management Authority and JCDH are establishing an Industrial and High Risk Runoff Program based on the criteria EPA and ADEM have set forth for this type of program. This program will require a cooperative effort between JCDH, Storm Water Management Authority, ADEM, and each city.

### ***Permit Requirements***

A program to identify and control pollutants in stormwater discharges to the MS4 from municipal landfills, other treatment, storage, or disposal facilities for municipal waste (e.g. transfer stations, incinerators, etc); hazardous waste treatment, storage, disposal and recovery facilities and facilities that are subject to EPCRA Title III, Section 313; and any other industrial or commercial discharge the permittee determines is contributing a substantial pollutant loading to the MS4 shall be implemented. The program shall include:

- I. Priorities and procedures for inspections and establishing and implementing control measures for such discharges;
- II. A monitoring( or self-monitoring) program for facilities identified under component 8 above); and
- III. A list of industrial stormwater sources, organized by watershed, discharging to the MS4 shall be maintained and updated as necessary.



The following phased timeline required is:

(some requirements of this program have been covered in previous sections)

- 1) By **October 1, 2010** establish SOP procedures in manual for industrial inspections and mitigation
- 2) By **December 1, 2010** establish a list of industrial NPDES sources in each watershed and develop a GIS map of all sources.
- 3) By **May 1, 2011** establish system with ADEM for getting permit NPDES lists and updates.
- 4) By **October 1, 2012** complete *Erosion and Sedimentation Control Ordinance* revisions for industrial program details and establishment according to EPA recommendations.

#### **Current Activities**

- 1) NPDES GIS map and source list being established by JCDH.
- 2) SOP manual being drafted and reviewed for industrial discharges procedures and mitigation.
- 3) Meetings are being held on revisions on the requirements for an industrial program in the *Erosion and Sedimentation Control Ordinance*.

#### **Planned Activities**

- 1) Continue revisions to the *Erosion and Sedimentation Control Ordinance* to bring Industrial Program into compliance with EPA requirements.
- 2) Field verification of all NPDES and industrial facilities for a more accurate GIS map.
- 3) Continue updating ADEM NPDES source list.

### **Component 10: Construction Site Runoff**

Storm Water Management Authority and JCDH are in the process of reorganizing the construction site runoff procedures and program. This will include all construction sites within the Storm Water Management Authority's cities. The tracking procedures will also be changed to allow for easier recording and retrieval of records.

#### **Permit Requirements**

A program to reduce the discharge of pollutants from construction sites shall be implemented. This program shall include:

- I. Requirements for the use and maintenance of appropriate structural and nonstructural best management practices to reduce pollutant discharged to the MS4 during the time construction is underway.
- II. Inspection of construction sites and enforcement of control measures
- III. Appropriate education and training measures for construction site operators: and

- IV. Notification of appropriate building permit applicants of their potential responsibilities under the NPDES permitting program for construction site runoff.

The following phased timeline required is:

- 1) By **October 1, 2010** promote two Erosion and Sedimentation Control Workshops for homebuilders.
- 2) By **October 1, 2010** develop Erosion and Sedimentation Brochure for the public.
- 3) By **December 1, 2010** develop online tracking program for all construction site permitting. This program will show inspectors when a site needs to be visited based on time allotted between visits. (1 months continuous basis)
- 4) By **February 1, 2011** promote an Erosion and Sedimentation Control workshop for city officials and JCDH employees.
- 5) By **May 1, 2011** revise *Erosion and Sedimentation Control Ordinance* to allow for inspections of all construction sites within Storm Water Management Authority's municipalities.
- 6) By **October 1, 2012** develop standardized procedures for all erosion inspections and construction drawing reviews across the Storm Water Management Authority's cities. This will be done in manual form.

### **Current Activities**

- 1) Two of two Erosion and Sedimentation Control Workshops have been conducted.
- 2) Construction site tracking program is being developed and reviewed and is on schedule.
- 3) *Erosion and Sedimentation Control Ordinance* is being evaluated on how to monitor all construction sites to meet recommendations given by EPA.
- 4) Brochure developed for Erosion and Sedimentation Control for distribution to the public.

### **Planned Activities**

- 1) Continue modifying *Erosion and Sedimentation Control Ordinance* according to EPA recommendations and future requirements.
- 2) Promote and help develop SOPs through employee training.
- 3) Promote and develop SOPs and BMP Plan Reviews through design manual.

## **Component 11: Public Education**

Public Education is a critical component of any stormwater program. The method used by Storm Water Management Authority and JCDH is to use the existing connections of both organizations to promote the best stormwater practices to the Maximum Extent Practicable (MEP). JCDH has existing connections in the communities through our various public outreach programs that allow the stormwater message to be carried to people within our area. These connections help to incorporate stormwater education

into existing programs and open the door into communities that would normally be harder to reach.

### ***Permit Requirements***

A public education program with the following elements shall be implemented:

- I. A program to promote, publicize, and facilitate public reporting of the presence of illicit discharges or improper disposal of materials into the MS4.
- II. A program to promote, publicize, and facilitate the proper management and disposal of used oil and household hazardous wastes.
- III. A program to promote, publicize, and facilitate the proper use, application, and disposal of pesticides, herbicides, and fertilizers by the public and commercial and private applicators and distributors.

The following phased timeline required is:

- 1) By **October 1, 2010** develop Stormwater Hotline.
- 2) By **October 1, 2010** develop Household Hazardous Waste (HHW) and Oil Disposal and Recycling Brochure.
- 3) By **October 1, 2010** promote a Household Hazardous Waste Day to all necessary organizations to see if funding is possible.
- 4) By **January 1, 2011** develop Brochure for proper use, application, and disposal of pesticides, herbicides, and fertilizers.
- 5) By **May 1, 2011** develop area priority maps on what areas to target for education on 303(d) pollutants and areas that are considered to be a priority to the Program.
- 6) By **May 1, 2011** start re-development of Stormwater website so as to provide current stormwater trends and data to the public.
- 7) By **May 1, 2011** promote a Community Watershed Clean-Up Day.

### ***Current Activities***

- 1) HHW day is being promoted but timeline looks like it will occur in the spring of 2011.
- 2) Brochures are being developed for HHW, Oil Disposal and Recycling, and for proper use, application, and disposal of pesticides, herbicides, and fertilizers.

### ***Planned Activities***

- 1) Re-develop Stormwater Website on current JCDH website
- 2) Begin target education based on 303(d) impairments and water quality trends.

## **Reporting**

All of the current items discussed in this SWMP Plan will be included in the annual report starting in the 2011 annual report to EPA. The SWMP Plan presented here will be updated on a yearly basis so as to keep current the state and goals of the Program.

DRAFT