Permittee: Louisiana Department of Transportation and Development

Permit Number: LAR043001

Agency Interest No: 108424

Reporting Period: January 1, 2018 - December 31, 2018

Annual Report
for the
Louisiana Pollutant Discharge Elimination System (LPDES)
General Permit for Discharges from
Regulated Small Municipal Separate Storm Sewer Systems (MS4s)

Date: March 10, 2019

Certification:

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

Signature: _____

Printed Name: Christopher Knotts, P.E.

Title: DOTD Chief Engineer Administrator

Date: 3/6/19

Contact Information

Name: Joubert Harris

Title: Environmental Compliance Administrator

Phone: 225-248-4141

Email: Joubert.Harris@la.gov

Mailing address: 5080 Florida Boulevard, Baton Rouge, Louisiana 70806

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List of Acronyms

AASHTO	American Association of State Highways and Transportation Officials
AST	Aboveground Storage Tank
BMP	Best Management Practice
CSI	Certified Storm Water Inspector
EA	Environmental Assessment
ECU	Environmental Compliance Unit
EPA	Environmental Protection Agency
GIS	Geographic Information Systems
LADOTD	Louisiana Department of Transportation and Development
LDAF	Louisiana Department of Agriculture and Forestry
LDEQ	Louisiana Department of Environmental Quality
LPB	Louisiana Public Broadcasting
LPDES	Louisiana Pollutant Discharge Elimination System
LSWA	Louisiana Solid Waste Association
LTRC	Louisiana Transportation Research Center
LUSC	Louisiana Urban Stormwater Coalition
MCM	Minimum Control Measure
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
NHI	National Highway Institute
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
O&M	Operation and Maintenance
PE	Project Engineer

PSA	Public Service Announcement
SPC	Spill Prevention and Control
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
UA	Urbanized Area

Executive Summary

It has been estimated that over 56,000 pounds of contaminants enter Louisiana waters from its highway drainage system per year. As the steward of Louisiana roads and bridges and therefore its drainage system, the Louisiana Department of Transportation and Development (LADOTD) has been proactive in combating the above alarming statistic to prevent the further deterioration of the state's surface waters. This is being accomplished through the implementation of a broad storm water management program to address discharges from its drainage system, construction sites, and facilities as mandated by the Louisiana Pollutant Discharge Elimination System General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s), master general permit number LAR040000.

The permit challenges the permittee to develop best management practices (BMPs) or water pollution controls for each of the six minimum control measures listed below.

- Public Education and Outreach on Storm Water Impacts
- Public Involvement/Participation
- Illicit Discharge Detection and Elimination
- Construction Site Storm Water Runoff Control
- Post-Construction Storm Water Management in New Development and Re-development
- Pollution Prevention/Good Housekeeping for Municipal Operations

Typically, the BMPs whether structurally engineered devices or procedural policies, are put into practice in areas designated by the permitting authority, however the LADOTD has chosen to apply its BMPs statewide.

To remain in permit compliance, the report presented here includes major topics to address each of the six annual report requirements as stated in the permit. The LADOTD's annual report details the pollution prevention activities undertaken by the permittee during the 2018 calendar year to reduce the pollutants entering its MS4 as well as limiting the polluted discharge from its MS4 to area water bodies.

Introduction:

In 1972, polluted point source discharges to the waters of the United States were prohibited unless authorized by the National Pollutant Discharge Elimination System (NPDES) permitting system. Originally, improvements to water quality focused on limiting industrial wastewater discharges and sanitary sewerage overages. However, it became evident that poor water quality was caused by more than these two processes alone. It was later recognized that polluted storm water runoff was a major contributor to impaired surface waters.

Polluted storm water runoff is collected, transported, and ultimately discharged to nearby surface waters without treatment. Common contaminants found in runoff include litter, sediment, and oil. In response to increasing runoff concerns, the Environmental Protection Agency (EPA) and state permitting authorities were tasked with implementing a two phased approach to address storm water discharges.

Phase I of the storm water program regulated discharges from medium and large municipal separate storm sewer systems (MS4s), construction activity that disturbs 5 or more acres of land, and ten categories of industrial activity. With the addition of the Phase II Rule, the reach of the storm water program was strengthened by authorizing the discharge of storm water from small MS4s and construction sites that disturb at least 1 acre of land.

Though the storm water program was implemented in two stages, Phase I and II, the program is typically divided into three basic components, municipal, industrial, and construction. Because of the Louisiana Department of Transportation and Development (LADOTD) massive operations, it functions in all three of these areas. The LADOTD holds several storm water permits for its construction projects, facilities, and highway drainage systems.

As required by the Louisiana Department of Environmental Quality (LDEQ), the state's permitting authority; the LADOTD submitted a notice of intent (NOI) in March 2003 requesting coverage for discharges from its MS4. The LDEQ granted the LADOTD statewide permit coverage under its Louisiana Permit Discharge Elimination System (LPDES) which was modeled after the NPDES in May 2003. The LPDES permitting mechanism charged the permittee to develop a comprehensive storm water management program that was designed to reduce the amount of runoff discharged to surface waters as well as the amount of pollutants within the discharge itself to the maximum extent practicable (MEP) in each of its urbanized areas (UAs) and the regulated areas designated by the LDEQ. This was to be achieved through developing best management practices (BMPs) for each of the six required minimum control measures (MCMs). Through evaluation of measurable goals, the effectiveness of the BMPs in meeting water quality requirements can be determined.

As a small MS4 operator in fifteen areas throughout the state, the LADOTD has chosen to write its storm water management plan (SWMP) in a manner that all BMPs are implemented statewide and not just in the permitted MS4s. However, for the purpose of this report, the cities listed below will be addressed as required by the permit:

- Alexandria urbanized area
- Baton Rouge urbanized area
- Houma urbanized area
- Lafayette urbanized area
- Lake Charles urbanized area
- Mandeville-Covington urbanized area
- Monroe urbanized area
- New Orleans urbanized area
- Shreveport urbanized area
- Slidell urbanized area
- LDEQ-designated regulated area of Abbeville
- LDEQ-designated regulated area of Bastrop
- LDEQ-designated regulated area of Hammond
- LDEQ-designated regulated area of Morgan City
- LDEQ-designated regulated area of Natchitoches

The activities undertaken during the first four years following the initial authorization under the 2002 general permit include, but are not limited to, developing a construction inspection program, educating the public via TV, print, and internet, and locating outfalls within the regulated areas to create a storm sewer system map. At the permit's expiration, the permittee had not completed all of the activities scheduled during the permit term; however, it had fulfilled the primary requirement of having adopted and executed a SWMP.

The LDEQ renewed the LADOTD's MS4 permit to the permittee on March 1, 2013. As the permittee entered this third permit term, the LADOTD modified its original implementation schedule to include new goals and to reflect progress made from the previous permit term. Per the 2013 permit, the LADOTD is required to conduct at a minimum, a yearly review of the storm water management program in preparation for the annual report. During the review period, the efficacy of all BMPs is evaluated using the established measurable goals. The results of the review and any changes made to the SWMP are then presented in the annual report.

Per Part V.C. of the 2013 general permit, the annual report must address the following requirements:

1. The status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices, progress towards achieving the statutory goal of reducing the discharge of pollutants to the maximum extent practicable (MEP), and the measurable goals for each of the MCMs;
2. Results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP;
3. A summary of the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule);

4. Proposed changes to your Storm Water Management Program, including changes to any BMPs or any identified measureable goals that apply to the program elements; and
5. Notice that you are relying on another government entity to satisfy some of your permit obligations (if applicable).

This annual report has been prepared to comply with the above conditions.

Program Evaluation

The section entitled *Program Evaluation* will fulfill the below annual report requirement from the 2013 general permit.

> *The status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices (BMPs), progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, and the measurable goals for the MCMs.*

Because the above requirement addresses several elements, the permittee has chosen to separate the requirement so that each component may be fully addressed.

Status of Compliance

The LADOTD's storm water management program was reviewed in its entirety and then compared to the mandates set forth in the 2013 general permit. After completing the required self-assessment, the LADOTD has determined that additional attention is needed in the following areas to sufficiently achieve permit compliance;

Part IV. D. 3 Illicit Discharge Detection and Elimination

BMP Assessment

During the annual evaluation of the SWMP, data is collected and analyzed to yield performance indicators. A performance indicator is a measurement of the effectiveness of the BMP relative to the MCM. It is used to determine if MCM improvements are needed. MCM improvements are achieved through the elimination and addition of BMPs. As a result of the self-assessment for the 2018 calendar year, the permittee has determined the BMPs developed satisfactorily address the required MCMs.

Progress towards Achieving the Statutory Goal

Per permit requirements, the LADOTD is mandated to reduce pollutants in storm water runoff to the MEP through the use of various BMPs. BMP efficacy is determined through data collection and evaluation. Additionally, the permittee conducts research on emerging technologies to determine the usefulness of new products and to ascertain if its value will be beneficial for future use. Because of continuous research efforts, the LADOTD remains current in its approach to handling polluted runoff. The permittee will continue to make significant strides in reducing polluted discharge to the MEP.

Measurable Goals for each of the MCMs

Measurable goals are quantifiable measurements that indicate effort, i.e. website traffic, miles swept, etc. This data tracked over time used in conjunction with performance indicators will quantitatively indicate the effectiveness of each BMP. Identification of productive versus non-productive BMPs allows the permittee to make necessary changes to strengthen its storm water management program. The measurable goals developed for each MCM are detailed in the section entitled Summary of Minimum Control Measures.

Summary of Minimum Control Measures

The section entitled *Summary of Minimum Control Measures* will fulfill the below annual report requirement from the 2013 general permit.

> *Results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.*

The results presented here represent the cumulative efforts of the permittee in all fifteen permitted areas, however to obtain area specific information refer to Appendix A. A measurable goals output table has been created for each urbanized and regulated area listing the data collected for each BMP for the 2018 calendar year. The activities for each minimum control measure are summarized below.

MCM: Public Education and Outreach on Storm Water Impacts

The permittee has developed six BMPs with a corresponding measureable goal to achieve compliance with the above MCM, public education and outreach of storm water impacts. The results, if any, of each BMP are presented below.

BMP: Flyers and Brochures

BMP Description: Design and publish flyers and/or brochures for the purpose of educating the public on various storm water related topics.

Summary of Results:

The permittee reproduced the brochure developed by the EPA entitled, *After the Storm*. The brochure provides an overview of the various sources of storm water pollution, the effect of contaminants on water bodies, and suggestions to the reader on how to prevent polluted runoff. An example of the brochure used by the LADOTD is provided in Appendix B. During 2018, the brochures were distributed statewide at various LADOTD properties and at the Louisiana Department of Culture, Recreation and Tourism Welcome Centers. The location and number of brochures disseminated in each permitted area is provided below.

Regulated Area	Location	Quantity
Lafayette, LA	Atchafalaya Rest Area	25
Lake Charles, LA	I-10 Eastbound Welcome Center	25
Houma, LA	LADOTD Customer Service for Toll	25
Choudrant, LA	Tremont West Bound Rest Area	25
Choudrant, LA	Tremont East Bound Rest Area	25

A second brochure, *Understanding Stormwater* was developed for distribution. The brochure provides a general overview of what storm water pollution is, its sources, and the problems associated with it. The brochure further details pollution prevention tips while traveling, and ways to get involved such as volunteering in our "Adopt-A Road Program" and LADOTD contact information to report any illegal activities. An example of the brochure is provided in Appendix B.

In addition to the brochures, the LDEQ designed poster titled *Make Changes, Be the Solution!* was displayed at 3 LADOTD maintenance facilities within the Baton Rouge urbanized area. The poster communicates to the reader, simple tasks that can assist in limiting contaminants in storm water discharges. The use of these locations was two-fold in that it provided an educational opportunity to local residents and the permittee's employees as well. An example of the poster in use is provided in Appendix C.

BMP: Storm Water Quality Website

BMP Description: Design and maintain a website to educate individuals on the impact of storm water runoff.

Summary of Results:

The permittee has developed a website completely dedicated to the topic of storm water. The topics covered on the website include the following:

- An MS4 Defined
- Examples of BMPs
- Previously submitted Annual Reports
- Examples of Illicit Discharges
- A Mechanism to Report an Illicit Discharge
- Urbanized Area Maps
- External Links to LADOTD Adopt-a-Road program, LDEQ website, and EPA website
- Contact LADOTD/Feedback Mechanism

As of November 14, 2006, the traffic to the website has been continuously monitored and to date has had 6,903 visitors. Of the 6,903 total views, 354 occurred in 2018. This represents a 2% decrease in visits in comparison to the previous reporting year. The website can be found at the following address: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Materials_Lab/MS4/Pages/default.aspx

BMP: Public Service Announcements

BMP Description: Develop and broadcast a storm water related public service announcement (PSA).

Summary of Results:

The permittee has produced a 30 second PSA for television focusing on the impact of runoff from Louisiana's highway system. The PSA also provides tips to the listener on how to prevent storm water related pollution. The verbiage of the PSA is given below:

> *Each year more than 56,000 pounds of trash, litter, and other contaminants from Louisiana's highways end up in our lakes, streams and scenic waterways. You can help prevent water pollution by keeping our roads clean, repair all fluid leaks in your vehicle, bag your trash and place it in designated trash bins, and report illegal dumping. Clean highways today, mean cleaner water tomorrow.*

The permittee has contracted with the Louisiana Public Broadcasting (LPB) station to broadcast the above LADOTD developed PSA. Because the permittee renews its contract annually with LPB during midyear, two separate contracts cover the 2018 calendar year. The first having a contract term June 30, 2017 to June 29, 2018 and the second and current contract term is from June 30, 2018 to June 29, 2019. The contract stipulates that the PSA will be aired a minimum of 40 times during each contract term. The PSA

had 99 broadcasts on the LPB station between 01/01/2018 to 12/31/2018. A copy of both contracts and the broadcast schedule are provided in Appendix D.

Additionally, the contract between the permittee and LPB provides the LADOTD an opportunity to be featured in the LPB *Visions* magazine. The LADOTD ran a 276-word article titled, A Clearer Picture: Stormwater. The article appeared in the August 2018 *Visions* publication, Volume 42, Issue 8, page 30. A copy of the article can be found in Appendix D.

BMP: Impacts of Illegal Dumping and Littering

BMP Description: Develop and distribute various public education materials that focus on illegal dumping.

Summary of Results:

The permittee uses a variety of methods to publicize the impact of illegal dumping and littering. Prints, television ads, as well as electronic media are used by the LADOTD to inform the public of the sources and effects of dumping and littering on area surface waters. The statewide circulation of the *After the Storm* brochure, the display of the Make Changes, Be the Solution! poster, the PSA developed for television broadcast, which also has been made available for online viewing, and the LADOTD developed website, all include verbiage on both subjects. In addition, the permittee has taken the added step to have its catch basin covers cast with the following phrase:

Dump No Waste *Drains to Waterways*

Please refer to Appendix E to view a photograph of a catch basin cover currently in use by the department.

BMP: Public Education on Construction Activities and New Development Activities

BMP Description: Develop and distribute various public education materials that inform the public of the impact of construction on area waters.

Summary of Results:

The impact of construction activity on water quality and the steps an individual can take during construction to limit erosion and sedimentation is included in the *After the Storm* brochure. Refer to Appendix B for an example brochure used by the department.

BMP: Education of School Children on the Importance of Water Quality

BMP Description: Develop and distribute educational materials related to storm water at LADOTD rest areas.

Summary of Results:

In order to educate small children of the importance of keeping our water clean, the LADOTD has received permission from the Metropolitan North Georgia Water Planning District to print and distribute an activity

booklet titled, "Be a Solution to Water Pollution". The activity booklet was distributed in a packet including crayons, stickers, and a book marker, Clean Water, Everybody's business. Packets were distributed at LADOTD rest areas and tourist centers statewide. Refer to Appendix F for an example of packet contents.

MCM: Public Involvement/Participation

The permittee has developed four BMPs with a corresponding measurable goal to ensure compliance with the above MCM, public involvement/participation. The results, if any, of each BMP are presented below.

BMP: Adopt-a-Road Program

BMP Description: Inform the public of volunteer opportunities available through the LADOTD sponsored Adopt-a-Road Program.

Summary of Results:

Various organizations contract with the LADOTD to voluntarily collect litter and other debris from state and federal right-of-ways (ROWs). The permittee has established a website dedicated to the recruitment of volunteer organizations by providing general information as well as contact information for the Adopt-a-Road Program. A link to the Adopt-a-Road website has also been established on the permittee's storm water website. The Adopt-a-Road website can be found at the following address: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Operations/adopt-a-road/Pages/default.aspx

The number of active groups that adopted highway segments within the permittee's urbanized areas or LDEQ-designated areas totaled 105 in 2018. This accounts for a total of 139.95 miles of adopted highway and 20.97 cubic yards of litter collected. Refer to the Measurable Goals Output table in Appendix A, 440-04, for area specifics.

BMP: Storm Water Management Program Document Review

BMP Description: Documents associated with the LADOTD's storm water management program will be made available on the department's storm water website for public review and comment.

Summary of Results:

The report prepared annually for submission to the LDEQ is available for review and comment on the permittee's website. The most recent and previous annual reports can be found at the following address: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Materials_Lab/MS4/Pages/AnnualReports.aspx . In 2018, the permittee did not receive any comments on the annual reports submitted to the LDEQ.

BMP: Public Information Requests

BMP Description: Respond and provide the necessary documents when appropriate, for information requests from the public.

Summary of Results:

A pdf copy of the *Public Records Request* form is available on the LADOTD website. The form along with instructions for its completion is available at the following address:

http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Administration/Documents/Public%20Records%20Request%20Form.pdf. Refer to Appendix G, to view a *Public Records Request* form.

BMP: Reporting System for Public

BMP Description: Establish a system to foster communication between the LADOTD and the public.

Summary of Results:

The permittee has provided the public with a feedback mechanism via the LADOTD storm water website. Using the *Contact Us/Report an Illicit Discharge* page, an individual can ask questions, report suspected illicit discharges, inform the permittee of illegal dump sites, or provide comments on the storm water program to the permittee. Any questions or comments received are answered and if necessary investigated by the LADOTD-Environmental Compliance Unit (ECU) personnel and then referred to the proper authority for action. The *Contact Us* page can be found at the following web address: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Pages/Contact_Us.aspx. No comments were received in 2018.

MCM: Illicit Discharge Detection and Elimination

The permittee has developed three BMP's with a corresponding measureable goal to achieve compliance with the above MCM, illicit discharge detection and elimination. The results, if any, of each BMP are presented below.

BMP: Maintain the MS4 and Outfall Inventory

BMP Description: Update the MS4 outfall map as needed.

Summary of Results:

The permittee has completed a storm sewer map using GIS technology for LDEQ designated areas and urbanized areas showing outfall locations and receiving waters. During 2019, the ECU will continue to improve maps on an as needed basis.

BMP: MS4 Outfall Screening

BMP Description: Conduct a visual inspection of MS4 outfalls annually to identify the presence of dry weather discharges.

Summary of Results:

Because the permittee has responsibilities in fifteen areas in the state, the implementation schedule developed by the LADOTD mandated that 10% of all MS4 outfalls be inspected annually. Screenings are done to identify outfalls with illicit discharges and investigate the source of those discharges. A MS4 outfall survey and an Illicit Discharge Visual Screening form were developed to assist us in this effort. Although we continue to strive towards our self-imposed goal, we have not reached the targeted percentage. We are hopeful with the full use of the GPS units and possible re-organizational changes, we will meet our goal. However, considering LADOTD has over 2,000 identified outfalls within its regulated MS4, we may need to reevaluate our goals. Please refer to Appendix H, to view both documents. Finally, no illicit discharge was reported through the LADOTD public website.

BMP: Illicit Discharge Employee Training

BMP Description: Educate personnel using the developed training aids for illicit discharge identification.

Summary of Results:

The LADOTD purchased training material from Excal Visual to assist with training our personnel in identifying illicit discharge. The training material consisted of a video titled, "IDDE: A Grate Concern, employee quiz, a trainer's guide, and pocket references. The training was presented in the annual Waste Water Recertification on August 29th to 34 participants statewide. Future plans will include continuing education of targeted sections in LADOTD. Refer to Appendix I, for an example of the Acknowledgement of Training Form, Employee Quiz and the Wastewater Recertification Agenda.

MCM: Construction Site Storm Water Runoff Control

The permittee has developed five BMPs with a corresponding measureable goal to achieve compliance with the above MCM, construction site storm water runoff control. The results, if any, of each BMP are presented below.

BMP: Construction Inspection Procedures

BMP Description: Develop written construction inspection procedures and forms.

Summary of Results:

Two inspection forms are in use by the permittee. The first is a one page LADOTD document, entitled *Inspection and Maintenance Report Form*. This form is used by the contractor during construction to satisfy the mandatory inspection schedule as required in the general storm water construction permit, LAR 600000. Used primarily to document structural BMP deficiencies, the form identifies the station number of areas of concern.

The second form, entitled *LADOTD Storm Water Construction Site Inspection Report*, is a three-page document used by the certified storm water inspectors (CSIs) of the LADOTD-ECU. This form mirrors the forms used by regulatory agencies by documenting not only structural BMP deficiencies but also procedural insufficiencies, corrective action log errors, storm water pollution prevention plan (SWPPP) deficiencies, etc. Examples of both forms are provided in Appendix J.

Instead of developing a field guide, the ECU will use the Construction Stormwater Field Guide by AASHTO. This guide provides information on pollution prevention/housekeeping, sediment control, erosion control and temporary drainage management. It also exhibits pictures of BMPs that are properly installed and maintained along with others that are not adequately maintained. An example of the field guide is provided in Appendix J.

BMP: Construction Storm Water Pollution Prevention Plan (SWPPP) Review

BMP Description: Develop procedures to require contractors to submit a site specific storm water pollution prevention plan for permittee review and approval.

Summary of Results

One storm water pollution prevention plan(SWPPP) has been developed that serves as a master template for all construction projects or sites covered by the permit. The purpose of the master template SWPPP is to have uniform, standardized structure for all DOTD construction projects. Site specific SWPPPs, however, are subsequently developed for each project to ensure adequacy and permit compliance. SWPPPs are reviewed for permit compliance during the inspections conducted by the CSIs. During a SWPPP review, deficiencies are noted and recommendations provided to strengthen the document and therefore improve the permittee's ability to reduce sediment laden runoff from its construction sites. In

2018, a total of 32 SWPPPs were reviewed statewide. A portion of the master SWPPP template is provided in Appendix R.

BMP: Construction Site Inspection

BMP Description: Inspect LADOTD construction sites that disturb at a minimum of one acre of soil and can potentially discharge runoff to an MS4.

Summary of Results:

In 2018, the permittee identified 60 construction projects within the boundaries of the fifteen permitted areas that disturbed at a minimum of 1 acre of soil. A records review determined that each project was inspected pursuant to the requirements set forth in the LDEQ storm water construction permits. Inspection forms along with other pertinent construction documents are housed at the office of the assigned project engineer.

BMP: Construction Community Education

BMP Description: Provide educational opportunities for departmental construction personnel.

Summary of Results:

The permittee in conjunction with LTRC are planning the implementation of a stormwater training course. This course will cover but is not limited to, permit regulations, pollution prevention principles, construction site inspections, erosion and sediment control. The goal is to offer the course to construction personnel and contractors.

BMP: Construction Related Public Reporting

BMP Description: Provide the public with a mechanism to report concerns regarding the LADOTD construction sites.

Summary of Results:

The permittee has a feedback mechanism on its storm water website for public use. No comments were received by the permittee during the 2018 calendar year.

In maintaining compliance with LDEQ storm water construction permit, LAR 600000, a notice is posted near the entrance of each of the LADOTD's construction sites. The notice provides interested parties with the information needed to comment on the construction project. Per permit requirements, the notices contain the permit number, a brief project description, and the point of contact for the project.

MCM: Post-Construction Storm Water Management in New Development and Re-development

The permittee has developed four BMPs with a corresponding measureable goal to achieve compliance with the above MCM, post construction storm water management in new development and re-development. The results, if any, of each BMP are presented below.

BMP: New Development and Re-development Plans Review

BMP Description: Review construction plans to assess post-construction runoff.

Summary of Results:

All construction projects are subject to a formal review by several sections at various stages of the plan development process. Phase reviews are held at the 30%, 60%, 90% and plan in hand (95%) completion stages for preliminary plans. Final plans are reviewed at the 60% and 95% completion stages.

Among its many responsibilities, the LADOTD-Hydraulics section has been charged with the task of drainage design and erosion/sediment control plan development and review. In response, the permittee's Hydraulics section has developed manuals to address these functions. The *Hydraulics Manual* provides information on design criteria and procedures in various area types. Specifically, urban drainage design considerations are addressed in Chapter II *Urban Drainage Design* of the *Hydraulics Manual.* A copy of the manual is available on the permittee's website at the following address: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Public_Works/Hydraulics/Documents/Hydraulics%20Manual.pdf

Additionally, the LADOTD-Hydraulics section has developed a supplement to the *Hydraulics Manual* entitled *Plan Checking and Design Procedures for Erosion and Sediment Control.* This document provides guidance with regards to both preliminary and final design plan checks. A copy of the narrative portion of the *Hydraulics Manual* supplement, *Plan Checking and Design Procedures for Erosion and Sediment Control* has been provided in Appendix M. A complete copy of the manual can be found on the permittee's website at the following address: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Road_Design/Erosion%20Control%20Guidelines/05%20Plan%20Checking%20Guidelines%20Document%20(6%20Pages).pdf

To ensure proper installation of erosion control devices, the Hydraulics section has developed standard plan, EC-01, Temporary Erosion Control Details. EC-01 provides installation information on the erosion control devices approved for use on LADOTD construction projects and is attached to all construction plans. EC-01 and an example of the erosion and sediment control symbology used on the permittee's construction plans is provided in Appendix N. The standard plan, EC-01 is also available at http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Road_Design/Erosion%20Control%20Guidelines/00%20La%20DOTD%20Erosion%20Control%20Guidelines%20(Full%20Text).pdf.

Construction plans are developed to indicate where specified erosion controls will be placed, how they are to be installed, and during which phase of construction. Because the permittee's construction plans are designed with the intent of future modification during subsequent reviews, plans may be altered

several times to minimize environmental impacts from erosion and sedimentation. During the plan in hand review, the LADOTD-Hydraulics section compares the plans with field conditions to assess existing or potential erosion problems and verify the future location of temporary and permanent erosion/sediment controls. A copy of the *Plan in Hand Memorandum Review* form can be found in Appendix O.

BMP: New Development and Re-development Project Inspection

BMP Description: Implement inspection program of projects using procedures developed to ensure conformance with post construction guidelines.

Summary of Results:

The *Project Delivery Manual* addresses operational performance post construction. The manual details the six stages of a project and assigns responsibility for each stage. The final stage, Systems Operation and Performance, is put into action once the project has been completed. Project system performance is measured through data collection and evaluation to determine if design procedures need to be modified to improve maintenance and operation of future projects. Of the many tasks completed during this stage, one is to ensure post construction environmental commitments are in compliance. Examples of post construction environmental commitments include post construction erosion controls and water quality monitoring. The responsibility matrix and section entitled, Compliance with Post Construction Environmental Commitments from Chapter 10: Stage 6 Systems Operating and Performance of the *Project Delivery Manual* are provided in Appendix Q for review. A copy of the *Project Delivery Manual* in its entirety is available on the permittee's website at the following address: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Project_Management/Project%20Delivery%20Manual/LA%20DOTD%20Project%20Delivery%20Manual%202013%20-%20FINAL.pdf.

BMP: Protection of Sensitive and/or Impaired Water Bodies

BMP Description: Implement appropriate post construction pollution control strategies for MS4 areas that discharge to LDEQ Section 303(d) List of Impaired Waters.

Summary of Results:

The ECU teamed with the department's GIS section and identified outfalls within each 303 (d) Impaired Water Body.

Prior to plan development, an environmental assessment (EA) is done for the proposed area of development. The EA provides the permittee with information regarding the topography, area structures, etc. If clearance is granted, the results of the EA are considered during plan development. As such, all required environmental permits are obtained and strict adherence to permit regulations is followed. *Section 3.6* of *Chapter 3 Design Controls* of the *Road Design Manual* detail the environmental considerations to take in account while developing the construction plan with regard to post construction operation. The manual is available at the permittee's website at the following address:

Road Design Manual
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Road_Design/Pages/Road-Design-Manual.aspx

BMP: Participation in Local Watershed Planning and Modeling

BMP Description: Participate in watershed meetings to stay abreast of current surface water quality issues and regulatory policy changes.

Summary of Results:

No watershed meetings were attended in 2018.

MCM: Pollution Prevention/Good Housekeeping for Municipal Operations

The Louisiana Department of Transportation and Development has created an *Activity Guide* for the Maintenance Division. The purpose of the manual is to provide personnel with a standard set of procedures for common practices used in the maintenance and preservation of highway surfaces, roadsides, structures, and traffic control devices. Each maintenance activity is assigned a five-digit activity code. This code is then used to track the type of maintenance activity performed at specific locations to yield numerical accomplishments. The permittee uses the accomplishments from this system as the measureable goals for a number of the BMPs addressed in this section.

The permittee has developed thirteen BMPs with a corresponding measurable goal to achieve compliance with the above MCM, prevention/good housekeeping for municipal operations. The results, if any, of each BMP are presented below.

BMP: Street Sweeping

BMP Description: Removal of sediment and other debris from MS4 roadways to reduce contaminant levels in street runoff to MS4s.

Summary of Results:

The mechanical cleaning of highway surfaces is listed in the LADOTD's *Activity Guide* as Sweeper Cleaning, 540-03. In 2018, 10,512.91 miles were swept within the regulated areas. For area specifics, refer to Appendix A.

BMP: Litter Collection

BMP Description: Removal of litter and debris from MS4 right-of ways to reduce floatables in runoff discharge, improve aesthetics, and create safe mowing conditions for departmental personnel.

Summary of Results:

The accomplishments from the following four maintenance activities are used to obtain the measurable goals for the litter collection BMP:

- Litter Cleaning of Roadside, 630-10
- Pick Up of Litter (Adopt-A-Road), 440-04
- Pick Up of Inmate Litter, 440-05
- Pick Up of Sheriff's Litter, 440-06

A total of 17,134.67 cubic yards of liter was collected from permitted areas. For area specifics, refer to Appendix A.

BMP: Herbicide Application

BMP Description: Ensure the application of herbicides is done in accordance to manufacturer specification by licensed applicators.

Summary of Results:

The spraying of undesirable vegetation that can cause damage to structures or obstruct drainage is performed by the 76 licensed herbicide applicators the permittee has on staff. Each herbicide applicator is licensed through the Louisiana Department of Agriculture and Forestry (LDAF). In addition to the LADF requirements, the LADOTD necessitates that each licensed applicator obtain continuing education hours through the department annually.

The accomplishments from the following two maintenance activities are used to obtain the measurable goals for the herbicide application BMP:

- Herbicide Application-Hand Method, 440-12
- Herbicide Application-Machine Method, 440-13

Herbicide application staff manually applied herbicides to 9,571.5 locations and mechanically sprayed 24,340.02 acres in the LADOTD urbanized and regulated areas. For, area specifics refer to Appendix A.

BMP: Roadside Drainage Maintenance

BMP Description: Non-functioning drainage structures are cleaned, repaired or replaced to improve drainage thereby reducing sediment and floatable discharges and providing safe travel on roadways.

Summary of Results:

The accomplishments from the following six maintenance activities are used to obtain the measurable goals for the roadside drainage maintenance BMP:

- Clean and Maintain Drainage Structures, 450-01
- Drainage Structure Repair, 450-02
- Install Drainage Culverts, 450-03
- Clean & Reshape Ditches-Hand Method, 450-04
- Clean & Reshape Ditches-Machine Method, 450-05
- Install/Replace Inlets & Catch Basins, 450-06

In 2018, maintenance of drainage structures occurred at 22,160.66 locations; 418 drainage structures were repaired; 31 new drainage culverts were installed; 16 inlets & catch basins were installed/replaced. 422,564.75 linear feet of ditches were cleaned and reshaped to improve drainage. For area specifics, refer to Appendix A.

BMP: Fleet Maintenance

BMP Description: All equipment and vehicles will adhere to the maintenance schedule provided by the manufacturer to reduce fluid leaks.

Summary of Results:

The permittee assigns all equipment a number according to its class code for tracking purposes. To ensure that the required routine maintenance on all vehicles and equipment is done as prescribed by the manufacturer, the LADOTD-Maintenance Systems Management Section uses Agile Assets System Database to track equipment use. The Agile Assets System Database is used not only to track usage rates, fuel transactions, and repairs made, but notify the permittee when scheduled maintenance is required. This database is for internal use only and is not made available on the permittee's website; however, the user's guide cover, table of contents, introduction and log in instructions have been made available in Appendix L.

BMP: Spill Prevention Plans

BMP Description: To comply with federal and state regulations, the permittee will develop spill prevention and control (SPC) plans at its facilities with aboveground storage tanks (ASTs).

Summary of Results:

In 2010, the permittee drafted a questionnaire to survey its facilities statewide. The purpose being to identify facilities with ASTs, the contents of the AST, and the volume typically kept on hand. Using the information gathered from the questionnaire, the LADOTD recognized facilities that would necessitate the development of a SPC plan. Fifty-five (55) SPC plans were developed for facilities statewide. Fifteen (15) SPC plans were revised in 2018. No new facilities have been identified as needing an SPC plan. Refer to Appendix P for example of SPC Questionnaire.

BMP: Employee Training

BMP Description: Develop and conduct employee training programs to educate maintenance personnel on a variety of storm water related topics. Training topics will include operation and maintenance (O&M) procedures for highways, structures, right-of-ways (ROW), equipment, recognizing illicit discharges, materials handling and storage, vegetation management, and pollution prevention BMPs.

Summary of Results:

Most trainings for maintenance personnel is provided in-house through the permittee's LTRC section or the employee's host district training office. Training topics and the number of trainings annually held vary greatly due to the permittee's diverse operations and large workforce. For illustration purposes, listed below are a few of the trainings held in 2018, in the permittee's regulated areas.

Date	Course Number	Course Title	Regulated Area
Continuous		Equipment Training	District 61
November 8, 2018		DOTD Drain Cleaning Activities	District 02
November 8, 2018		DOTD Winter Preparations	District 02
October 18, 2018		Qualified Inspector Program	
April 4, 2018		Certified Stormwater Inspector Recertification	

Training records are maintained by the training coordinator assigned to the host district.

BMP: Illegal Dumping

BMP Description: Investigate illegal dumping activities at LADOTD properties to determine the source of materials, report results of investigation to proper authorities and to coordinate remediation efforts.

Summary of Results:

The accomplishment from the maintenance activity, Spill Clean Up, 425-01, is used to obtain the measureable goal for the illegal dumping BMP. In 2018, 493 locations were identified within the permitted UAs and LDEQ designated areas as containing illegally dumped materials. The responsible parties were not known nor could be determined; however, the discarded materials were removed and properly disposed of by the permittee. For area specifics, refer to Appendix A.

BMP: De-icing/Anti-icing Materials Management

BMP Description: Ensure proper storage and if necessary installation of secondary containment for icing/anti-icing agents. Materials used for ice and snow control will be applied at the prescribed rates to prevent excess from entering neighboring waters.

Summary of Results:

The accomplishments from the following maintenance activities are used to obtain the measureable goals for de-icing/anti-icing materials management BMP.

- Snow & Ice Control, 540-07
- Snow & Ice Inspection/Reconnaissance, 540-09

A total of 24,133.34 hours were dedicated to the monitoring of road conditions, staging of materials and equipment, and the application of agents to improve travel conditions. For area specifics, refer to Appendix A.

To comply with WE-AO-10-01940, an Administrative Order issued by the LDEQ to the Louisiana Department of Transportation on December 8, 2010, and permit number LA0125563, the permittee presents the amount of de-icing/agents used throughout the state. During 2018, the permittee applied

To comply with WE-AO-10-01940, an Administrative Order issued by the LDEQ to the Louisiana Department of Transportation on December 8, 2010, and permit number LA0125563, the permittee presents the amount of de-icing/agents used throughout the state. During 2018, the permittee applied 539 cubic yards of lightweight aggregate and 3,218,150 pounds of salt statewide. For area specifics, refer to Appendix K. specific areas.

BMP: Bulk Materials Management

BMP Description: Stockpiles are to be stored in designated areas and inventoried regularly to determine loss of materials due to erosion.

Summary of Results:

The proper management of stockpiles can minimize environmental impacts and reduce replacement costs. This is accomplished through the use of designated areas for each type of material. Erosion controls are implemented near stockpiles that are prone to precipitation and wind erosion.

The accomplishment from the maintenance activity, Material Hauling, 630-03, is used to obtain the measureable goal for bulk materials management BMP. Maintenance personnel dedicated 2,882.76 hours to the loading, hauling, unloading, and inventory of bulk materials during the 2018 calendar year. For area specifics, refer to Appendix A.

BMP: Bridge and Structure Maintenance

BMP Description: The removal of debris from bridge structures to improve drainage and appearance.

Summary of Results:

The accomplishments from the following maintenance activities are used to obtain the measureable goals for the bridge and structure maintenance BMP.

- Clean Structural Members, 465-00
- Clean Deck & Drain, 465-01
- Remove Drift, 465-17

475,140.48 linear feet of drainage structures were cleaned by removing waste from deck drains and lines. Trash was removed from 245 locations near bridge drainage structures and culverts in 2018. Refer to Appendix A to obtain area specifics.

BMP: Debris Management

BMP Description: To clear the highway or roadside of potential hazards and ensure the proper disposal of collected waste.

Summary of Results:

- Disposal of Roadway Debris, 630-09

3,043.61 cubic yards of accident or storm related waste was collected on Louisiana roadways and roadsides in 2018. Routine debris was removed and properly disposed of from 15,965.65 miles of highway and shoulder in 2018. Refer to Appendix A to obtain area specifics.

BMP: Erosion and Sediment Control

BMP Description: To repair and control erosion in the permittee's ROW.

Summary of Results:

The accomplishments from the maintenance activity, Erosion Control and Repair, 440-00, is used to obtain the measureable goal for the erosion and sediment control BMP. 4,644 square yards of erosion and sediment control materials were implemented within the LADOTD permitted areas. These practices include the backfilling of minor washouts or cuts and the repair of slopes. Refer to Appendix A for area specifics.

Looking Ahead: Storm Water Activities for 2019

This section will fulfill the below annual report requirement from the 2013 general permit.

> *A summary of the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule).*

The LADOTD Environmental Compliance Unit (ECU) will not only continue its work efforts in 2019 with internal stakeholders and the LDEQ to further address initiatives, previously identified, but also reach out to the owners/operators of smaller MS4s which may be contiguous with or impacted by the operation of its infrastructures. One of the first tasks will be to identify these MS4s and their owners/operators with the intent of establishing points of contact followed by meaningful communication. The ECU envisions this initial task as a point of motivation which will, ultimately, lead to a more effective stormwater management of the various watersheds across the state. LADOTD will look for ways to continuously engage these MS4s and work through common challenges and goals. LADOTD will continue to update its outfall maps for the areas of the 303 (d) Impaired Water Bodies, and also continue to screen and assess the many outfalls throughout its MS4. Last year, we referenced the recent acquisition of "top quality" GPS units as part of our mapping and assessment plans for this program. Despite their value not having yet been fully utilized, the ECU is still excited about the acquisition of these units to aid in its on-going outfall assessments efforts and look forward to the benefits of their full utilization. We will, also, continue to work with our training Section (LTRC) to develop ideas and assess proposals from outside vendors for the identification and presentation of related stormwater training for the appropriate program stakeholders.

The ECU's efforts over the last three years to include the various stormwater related topics, as part of the Department's Annual Water and Wastewater Re-certification training, has continued to be a positive move. This has now become a recognized and valued vehicle for educating a number of statewide internal stakeholders. We will, therefore, again include such topics in this year's class. As previously stated, the class is LDH approved and will be scheduled to take place during the month of August. This training will be in addition to planned training initiatives mentioned above involving LTRC.

Although LADOTD has now been authorized (December, 2016) to discharge under its most recent Construction and Maintenance Stormwater Permit, the ECU and the Construction Section still spends a significant amount of time assisting its stakeholders with the implementation of the new permit. We foresee and intend to continue providing such assistance in 2019 to ensure compliance with the permit.

As always, the LADOTD appreciates the work relationship which exist with the LDEQ and looks forward to such continued work efforts in addressing the various environmental obligations of the State.

Storm Water Management Program Changes

The *Storm Water Management Program Changes* section will fulfill the below annual report requirement from the 2013 general permit.

> *Proposed changes to your Storm Water Management Program, including changes to any BMPs or any identified measureable goals that apply to the program elements.*

The LADOTD has no management plan changes for this year.

Sharing Responsibility

The section entitled *Sharing Responsibility* will fulfill the below annual report requirement from the 2013 general permit.

> *Notice that you are relying on another government entity to satisfy some of your permit obligations (if applicable).*

Although, the LADOTD does not rely on any other government entity and wholly accepts the responsibility to satisfy its permit obligations entirely, we enjoy our work relationship with the LDEQ in changing, specific benchmarks and etc. This relationship better enables the LADOTD to achieve its permit requirements.

Appendix A

Measurable Goals Output Tables I-XV

Table I

LDEQ- designated regulated area: **Abbeville**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	3
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	5
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Number of Active Groups	N/A	Each	0
	Number of Miles Adopted	N/A	Miles	0
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	0
	Herbicide Application-Machine Method	440-13	Acres	218.70
	Number of Licensed Applicators		Each	2
	Number of Training Hours		Hours	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	173
	Drainage Structure Repair	450-02	Each	1
	Install Drainage Culverts	450-03	Each	0
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	0
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	400
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	720
	Remove Drift	465-17	Each	1
Street Sweeping	Sweeper Cleaning	540-03	Miles	0
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	94
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	33
Bulk Materials Management	Material Hauling	630-03	Hours	425.5
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	0
	Clearing Roadways Travel Lanes	440-19	Miles	0
	Disposal of Debris/Litter	630-09	Cubic Yards	108

Table II

UA: **Alexandria**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	5
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	167.25
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	12.5
	Number of Active Groups	N/A	Each	9
	Number of Miles Adopted	N/A	Miles	23.13
	Pick Up of Inmate Litter	440-05	Cubic Yards	194
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	0
	Herbicide Application-Machine Method	440-13	Acres	596.5
	Number of Licensed Applicators		Each	4
	Number of Training Hours		Hours/Each	12
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	112
	Drainage Structure Repair	450-02	Each	11
	Install Drainage Culverts	450-03	Each	0
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	10
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	12,864.3
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	910
	Remove Drift	465-17	Each	2
Street Sweeping	Sweeper Cleaning	540-03	Miles	62.36
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	437.5
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	6.6
Bulk Materials Management	Material Hauling	630-03	Hours	225.50
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	0
	Clearing Roadways Travel Lanes	440-19	Miles	10.3
	Disposal of Debris/Litter	630-09	Cubic Yards	2

Table III

LDEQ- designated regulated area: **Bastrop**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	3
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	20
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Number of Active Groups	N/A	Each	0
	Number of Miles Adopted	N/A	Miles	0
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	4,742.5
	Herbicide Application-Machine Method	440-13	Acres	256
	Number of Licensed Applicators		Each	0
	Number of Training Hours		Hours	N/A
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	747
	Drainage Structure Repair	450-02	Each	8
	Install Drainage Culverts	450-03	Each	5
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	3,090
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	7,515
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	2,400
	Remove Drift	465-17	Each	41
Street Sweeping	Sweeper Cleaning	540-03	Miles	0
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	1,268
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	3,174
Bulk Materials Management	Material Hauling	630-03	Hours	0
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	607.1
	Clearing Roadways Travel Lanes	440-19	Miles	0.01
	Disposal of Debris/Litter	630-09	Cubic Yards	0

Table IV

UA: **Baton Rouge**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	179
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	349
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	1,341.22
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	7.87
	Number of Active Groups	N/A	Each	12
	Number of Miles Adopted	N/A	Miles	11.9
	Pick Up of Inmate Litter	440-05	Cubic Yards	70.50
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	29
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	714
	Herbicide Application-Machine Method	440-13	Acres	910.43
	Number of Licensed Applicators		Each	7
	Number of Training Hours		Hours	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	5,233.50
	Drainage Structure Repair	450-02	Each	12
	Install Drainage Culverts	450-03	Each	5
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	240
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	83,172.70
	Install/Replace Inlets & Catch Basins	450-06	Each	2
	Clean Structural Members	465-00	Each	0
Bridge & Structure Maintainence	Clean Deck & Drain	465-01	Linear Feet	21,742
	Remove Drift	465-17	Each	2
Street Sweeping	Sweeper Cleaning	540-03	Miles	1,036.80
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	260.24
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	7
Bulk Materials Management	Material Hauling	630-03	Hours	704.26
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	224.01
	Clearing Roadways Travel Lanes	440-19	Miles	68
	Disposal of Debris/Litter	630-09	Cubic Yards	61

Table V

LDEQ- designated regulated area: **Hammond**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	17
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	470.31
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0.60
	Number of Active Groups	N/A	Each	7
	Number of Miles Adopted	N/A	Miles	7
	Pick Up of Inmate Litter	440-05	Cubic Yards	144
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	0
	Herbicide Application-Machine Method	440-13	Acres	1,334
	Number of Licensed Applicators		Each	11
	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	1,238
	Drainage Structure Repair	450-02	Each	4
	Install Drainage Culverts	450-03	Each	2
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	0
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	44,387
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	0
	Remove Drift	465-17	Each	180
Street Sweeping	Sweeper Cleaning	540-03	Miles	80.80
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	170.50
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	50.50
Bulk Materials Management	Material Hauling	630-03	Hours	339
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	184
	Clearing Roadways Travel Lanes	440-19	Miles	8.30
	Disposal of Debris/Litter	630-09	Cubic Yards	211.50

Table VI

UA: **Houma**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	18
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	449.25
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Number of Active Groups	N/A	Each	10
	Number of Miles Adopted	N/A	Miles	15.25
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	0
	Herbicide Application-Machine Method	440-13	Acres	6,802
	Number of Licensed Applicators		Each	3
	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	1,137
	Drainage Structure Repair	450-02	Each	17
	Install Drainage Culverts	450-03	Each	6
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	0
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	21,365
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	0
	Remove Drift	465-17	Each	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	0
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	55.50
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	1
Bulk Materials Management	Material Hauling	630-03	Hours	174
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	0
	Clearing Roadways Travel Lanes	440-19	Miles	0
	Disposal of Debris/Litter	630-09	Cubic Yards	50

Table VII

UA: **Lafayette**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	45
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	520.381
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Number of Active Groups	N/A	Each	7
	Number of Miles Adopted	N/A	Miles	5.6
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	0
	Herbicide Application-Machine Method	440-13	Acres	2,698
	Number of Licensed Applicators		Each	6
	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	1,079
	Drainage Structure Repair	450-02	Each	86
	Install Drainage Culverts	450-03	Each	1
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	9
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	73,340
	Install/Replace Inlets & Catch Basins	450-06	Each	4
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	0
	Remove Drift	465-17	Each	19
Street Sweeping	Sweeper Cleaning	540-03	Miles	10
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	724.5
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	131
Bulk Materials Management	Material Hauling	630-03	Hours	43
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	0
	Clearing Roadways Travel Lanes	440-19	Miles	7.59
	Disposal of Debris/Litter	630-09	Cubic Yards	20

Table VIII

UA: **Lake Charles**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	97.5
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	913
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Number of Active Groups	N/A	Each	6
	Number of Miles Adopted	N/A	Miles	8.25
	Pick Up of Inmate Litter	440-05	Cubic Yards	193.17
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	0
	Herbicide Application-Machine Method	440-13	Acres	2,166.01
	Number of Licensed Applicators		Each	3
	Number of Training Hours		Hours/Each	12
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	362
	Drainage Structure Repair	450-02	Each	8
	Install Drainage Culverts	450-03	Each	0
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	0
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	17,303
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	10,542
	Remove Drift	465-17	Each	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	105.24
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	0
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	0
Bulk Materials Management	Material Hauling	630-03	Hours	110
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	0
	Clearing Roadways Travel Lanes	440-19	Miles	2
	Disposal of Debris/Litter	630-09	Cubic Yards	6

Table IX

UA: **Mandeville-Covington**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	1
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	61.10
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Number of Active Groups	N/A	Each	1
	Number of Miles Adopted	N/A	Miles	3
	Pick Up of Inmate Litter	440-05	Cubic Yards	190
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	0
	Herbicide Application-Machine Method	440-13	Acres	1,934.50
	Number of Licensed Applicators		Each	11
	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	413
	Drainage Structure Repair	450-02	Each	41
	Install Drainage Culverts	450-03	Each	3
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	500
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	58,109
	Install/Replace Inlets & Catch Basins	450-06	Each	10
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	360
	Remove Drift	465-17	Each	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	28
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	36
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	0
Bulk Materials Management	Material Hauling	630-03	Hours	36
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	17
	Clearing Roadways Travel Lanes	440-19	Miles	6.70
	Disposal of Debris/Litter	630-09	Cubic Yards	0

Table X

UA: **Monroe**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	38.5
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	4,213
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	2,300.85
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Number of Active Groups	N/A	Each	6
	Number of Miles Adopted	N/A	Miles	6
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	3,020
	Herbicide Application-Machine Method	440-13	Acres	5,921
	Number of Licensed Applicators		Each	1
	Number of Training Hours		Hours	6
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	3,226
	Drainage Structure Repair	450-02	Each	2
	Install Drainage Culverts	450-03	Each	1
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	308
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	43,683.75
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	220,996
	Remove Drift	465-17	Each	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	3,109.37
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	15,494
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	117
Bulk Materials Management	Material Hauling	630-03	Hours	581
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	0
	Clearing Roadways Travel Lanes	440-19	Miles	15,845.02
	Disposal of Debris/Litter	630-09	Cubic Yards	3

Table XI

LDEQ- designated regulated area: **Morgan City**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	2
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	238.51
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Number of Active Groups	N/A	Each	1
	Number of Miles Adopted	N/A	Miles	1
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	0
	Herbicide Application-Machine Method	440-13	Acre	95.8
	Number of Licensed Applicators		Each	2
	Number of Training Hours		Hours	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	383
	Drainage Structure Repair	450-02	Each	0
	Install Drainage Culverts	450-03	Each	0
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	0
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	5,401
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	96
	Clean Deck & Drain	465-01	Linear Feet	39,755
	Remove Drift	465-17	Each	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	32.72
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	264
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	160
Bulk Materials Management	Material Hauling	630-03	Hours	14
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	0
	Clearing Roadways Travel Lanes	440-19	Miles	14.73
	Disposal of Debris/Litter	630-09	Cubic Yards	102

Table XII

LDEQ- designated regulated area: **Natchitoches**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	0
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	0
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Number of Active Groups	N/A	Each	4
	Number of Miles Adopted	N/A	Miles	7.32
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	0
	Herbicide Application-Machine Method	440-13	Acres	249.08
	Number of Licensed Applicators		Each	1
	Number of Training Hours		Hours	12
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	10
	Drainage Structure Repair	450-02	Each	3
	Install Drainage Culverts	450-03	Each	0
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	0
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	1,050
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	450
	Remove Drift	465-17	Each	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	0
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	12
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	0
Bulk Materials Management	Material Hauling	630-03	Hours	0
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	0
	Clearing Roadways Travel Lanes	440-19	Miles	1
	Disposal of Debris/Litter	630-09	Cubic Yards	0

Table XIII

UA: **New Orleans**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	64
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	6,560.703
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Number of Active Groups	N/A	Each	37
	Number of Miles Adopted	N/A	Miles	39.25
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	0
	Herbicide Application-Machine Method	440-13	Acres	176
	Number of Licensed Applicators		Each	13
	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	3,979.16
	Drainage Structure Repair	450-02	Each	190
	Install Drainage Culverts	450-03	Each	5
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	153
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	16,506
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	3
	Clean Deck & Drain	465-01	Linear Feet	166,303.49
	Remove Drift	465-17	Each	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	5,969.42
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	361.50
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	69.50
Bulk Materials Management	Material Hauling	630-03	Hours	116
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	0
	Clearing Roadways Travel Lanes	440-19	Miles	1
	Disposal of Debris/Litter	630-09	Cubic Yards	1,445

Table XIV

UA: **Shreveport**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	17
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	82
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	2,776.36
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Number of Active Groups	N/A	Each	4
	Number of Miles Adopted	N/A	Miles	7.25
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	91
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	1,095
	Herbicide Application-Machine Method	440-13	Acres	97
	Number of Licensed Applicators		Each	1
	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	3,998
	Drainage Structure Repair	450-02	Each	35
	Install Drainage Culverts	450-03	Each	0
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	0
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	0
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	1
	Clean Deck & Drain	465-01	Linear Feet	5,180
	Remove Drift	465-17	Each	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	9.2
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	755
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	442
Bulk Materials Management	Material Hauling	630-03	Hours	1
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	0
	Roadway Clearing	440-19	Miles	0
	Disposal of Debris/Litter	630-09	Cubic Yards	3

Table XV

UA: **Slidell**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	3
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	240.10
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Number of Active Groups	N/A	Each	1
	Number of Miles Adopted	N/A	Miles	5
	Pick Up of Inmate Litter	440-05	Cubic Yards	138
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	0
	Herbicide Application-Machine Method	440-13	Acres	885
	Number of Licensed Applicators		Each	11
	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	70
	Drainage Structure Repair	450-02	Each	0
	Install Drainage Culverts	450-03	Each	3
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	0
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	33,158
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	5,781.99
	Remove Drift	465-17	Each	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	69
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	7
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	2
Bulk Materials Management	Material Hauling	630-03	Hours	113.50
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	0
	Clearing Roadways Travel Lanes	440-19	Miles	1
	Disposal of Debris/Litter	630-09	Cubic Yards	0

Appendix B

After the Storm Brochure

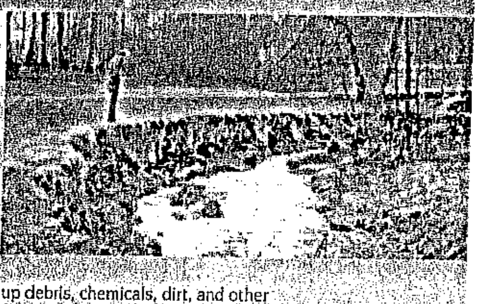
&

Understanding Water Brochure

What is stormwater runoff?

Stormwater runoff occurs when precipitation from rain or snowmelt flows over the ground. Impervious surfaces like driveways, sidewalks, and streets prevent stormwater from naturally soaking into the ground.

Why is stormwater runoff a problem?

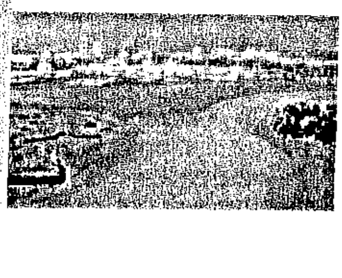


Stormwater can pick up debris, chemicals, dirt, and other pollutants and flow into a storm sewer system or directly to a lake, stream, river, wetland, or coastal water. Anything that enters a storm sewer system is discharged untreated into the waterbodies we use for swimming, fishing, and providing drinking water.

The effects of pollution

Polluted stormwater runoff can have many adverse effects on plants, fish, animals, and people.

- Sediment can cloud the water and make it difficult or impossible for aquatic plants to grow. Sediment also can destroy aquatic habitats.
- Excess nutrients can cause algae blooms. When algae die, they sink to the bottom and decompose in a process that removes oxygen from the water. Fish and other aquatic organisms can't exist in water with low dissolved oxygen levels.
- Bacteria and other pathogens can wash into swimming areas and create health hazards, often making beach closures necessary.
- Debris—plastic bags, six-pack rings, bottles, and cigarette butts—washed into waterbodies can choke, suffocate, or disable aquatic life like ducks, fish, turtles, and birds.
- Household hazardous wastes like insecticides, pesticides, paint, solvents, used motor oil, and other auto fluids can poison aquatic life. Land animals and people can become sick or die from eating diseased fish and shellfish or ingesting polluted water.



- Polluted stormwater often affects drinking water sources. This, in turn, can affect human health and increase drinking water treatment costs.

Get Involved

Volunteers are encouraged to adopt sections of state or federal highways to keep clean. All supplies are provided by the department. Contact the LA DOTD's customer service to be connected with an Adopt-A Road coordinator in your area.

Call 1-877-4LA-DOTD to contact customer service.

You see someone sweeping yard waste into a storm drain, dumping debris in a vacant lot, or a storm water pipe or ditch discharging during dry weather. What should you do? Report it! These activities are not only harmful to the environment but illegal. Call customer service or report the incident online at www.dotd.la.gov/highways/construction/lab/ms4/home.asp?page=contact$

And finally, educate others of the effect of storm water pollution.

DOTD

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

FOR ADDITIONAL INFO CONTACT

Louisiana Department of Transportation & Development's Materials and Testing Section

5080 Florida Blvd.
Baton Rouge, LA 70806
Phone: 225-248-4141

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

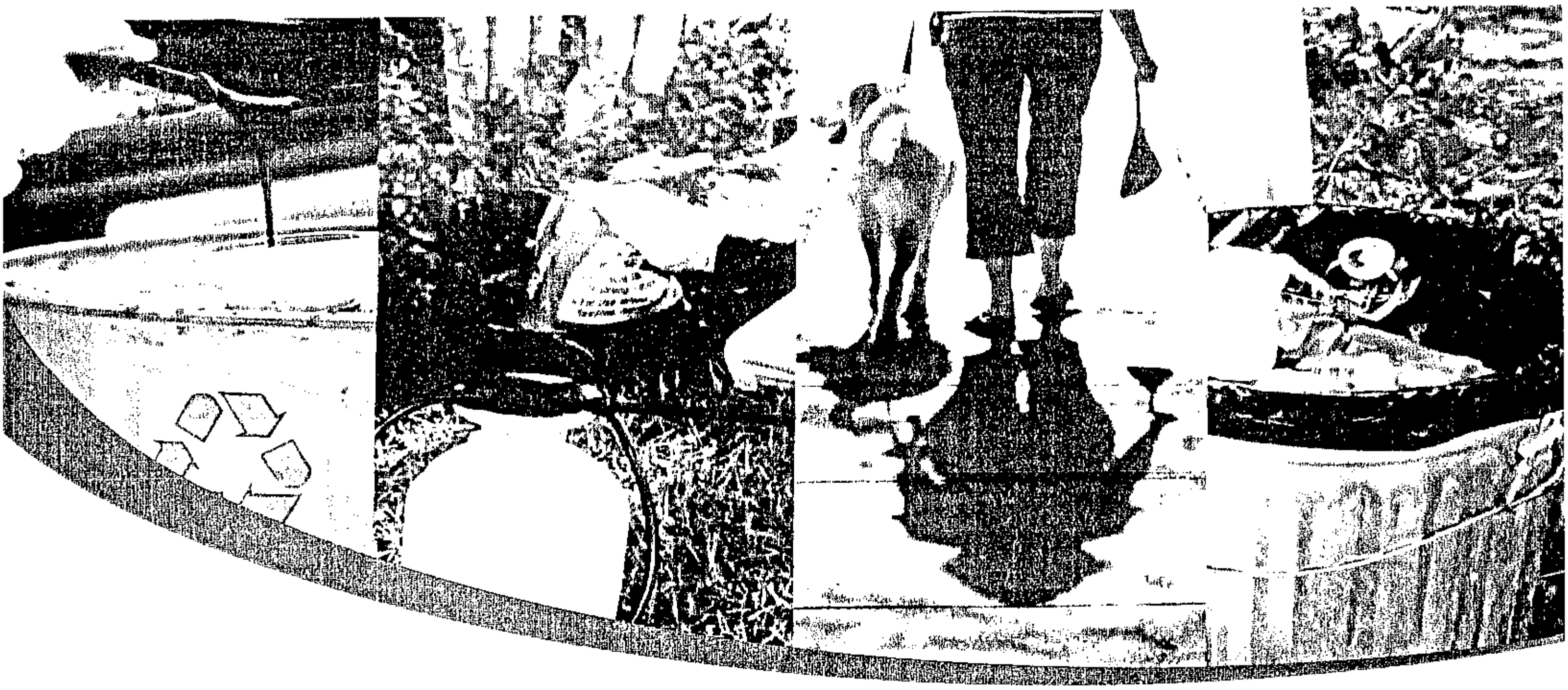
Understanding Stormwater

Louisiana's on the move
DOTD builds the way

http://www.dotd.la.gov/highways/construction/lab/ms4/home.asp

Appendix C

Make Changes, Be the Solution! Poster



MAKE CHANGES! BE THE SOLUTION!

Everything you blow, spray, pour or throw on the ground can get washed down the storm drain – polluting Louisiana's waters

- Recycle oil
- Use less fertilizer and pesticides
- Mulch or bag grass clippings
- Bag pet waste
- Don't litter

Find out more at: WWW.DEQ.LOUISIANA.GOV

This document was published at a total cost of [illegible] by the Louisiana Department of Environmental Quality, PO Box 4301, Baton Rouge, [illegible]

Appendix D

LPB Contracts, Broadcast Schedule and LPB Article

UNDERWRITING AGREEMENT:
Louisiana Public Broadcasting
7733 Perkins Road, Baton Rouge, LA 70810-1199
(225) 767-4466
(225) 767-4421 (FAX)
Jeanne S. Smith, Underwriting Director
jsmith@lpb.org

Louisiana Department of Transportation & Development: FELPB general support during prime time 2017-2018 (Page 1 of 2)

Louisiana Dept. of Transportation and Development **Sponsoring Company Name:**	Dori Turner, Environmental Impact Specialist **Contact Name and Title:**
5080 Florida Boulevard **Address:**	Baton Rouge, LA 70806 **City, State and Zip:**
(225) 248-4178 **Phone Number:**	dori.turner@la.gov **Email:**

This document will serve to verify and specify the conditions relating to an agreement between the Foundation for Excellence in Louisiana Public Broadcasting (FELPB) and the Louisiana Department of Transportation & Development Materials and Testing Section for providing general support to programming broadcast on Louisiana Public Broadcasting, (LPB):

General-support announcements

Schedule timeframe: June 30, 2017-June 29, 2018

Promotional Considerations:

Louisiana Department of Transportation & Development Materials and Testing Section will receive the following promotional considerations:

- Twenty, 20, (:30 second) messages supporting DOTD's Storm Water Campaign. Messages will air Sunday through Saturday during prime-time and How-to programming, June 30, 2017 through June 29, 2018.
- Twenty, 20, (:30 second) BONUS messages supporting DOTD's Storm Water Campaign, also airing Sunday through Saturday during prime-time and How-to programming, June 30, 2017 through June 29, 2018.
- Messages should air, 3-4 per month, over the year-long schedule.
- One (1) "In Good Company" feature article in LPB Visions magazine (August 2018).
- Acknowledgement in the underwriter's section of Visions as a general support underwriter.
- Acknowledgement in the underwriter's section of LPB.org.
- Louisiana Department of Transportation & Development website will be linked to LPB.org.

Preemptions:

Due to LPB's commitment to serve the community, dates and times of programs, repeats and underwriter acknowledgments are subject to change or cancellation without notice. When reasonably possible, LPB will reschedule the underwritten program to include applicable underwriter credits.

Louisiana Department of Transportation & Development/FELPB Agreement 2017-2018 cont'd (Page 2 of 2)

Cancellation Option:

The underwriter has the option to cancel this agreement after a minimum of 90 days from the date of the first airing, by providing a minimum of 30 days prior written notice of cancellation. During the 30 day period, LPB may continue to air the credits and the underwriter will be obligated for the contract amounts through the date of termination.

Contract Amount / Payment:

The Louisiana Department of Transportation & Development Materials and Testing Section agrees to pay the sponsorship rate of $1,500 NET for sponsorship package listed on page one of this agreement. Sponsorship will be billed in one payment as follows: $1,500.00 NET in May 2018.The sponsor agrees to remit invoice(s) within 30 days of invoiced date(s).

TOTAL AMOUNT: $1,500.00 NET-May 2018

Default:

If the underwriter fails to make any payment when due, FELPB may, in addition to other remedies, discontinue airing any or all credits.

No Warranties:

The underwriter is solely responsible for selecting the program(s) it wishes to underwrite, and FELPB makes no warranties, implied or express, regarding such program(s).

By the signatures below, the sponsor and FELPB agree to perform the mutual obligations as outlined above in accordance with all terms and conditions of this sponsorship agreement.

Effective Date: June 30, 2017

End Date: June 29, 2018

Sponsor approval by:

_____ **Date:** 6/8/17

Witness:

Dori Turner **Date:** 6/8/17

Foundation for Excellence in LPB approval by:

_____ **Date:** 06-13-17

Witness:

_____ **Date:** 6-13-17

UNDERWRITING AGREEMENT:
Louisiana Public Broadcasting
7733 Perkins Road, Baton Rouge, LA 70810-1199
(225) 767-4466
(225) 767-4421 (FAX)
Jeanne S. Smith, Underwriting Director
jsmith@lpb.org

Louisiana Department of Transportation & Development: FELPB general support during prime time 2018-2019 (Page 1 of 2)

Louisiana Dept. of Transportation and Development — **Sponsoring Company Name:**
Dori Turner, Environmental Impact Specialist — **Contact Name and Title:**

5080 Florida Boulevard — **Address:**
Baton Rouge, LA 70806 — **City, State and Zip:**

(225) 248-4178 — **Phone Number:**
dori.turner@la.gov — **Email:**

This document will serve to verify and specify the conditions relating to an agreement between the Foundation for Excellence in Louisiana Public Broadcasting (FELPB) and the Louisiana Department of Transportation & Development Materials and Testing Section for providing general support to programming broadcast on Louisiana Public Broadcasting, (LPB):

General-support announcements

Schedule timeframe: June 30, 2018-June 29, 2019

Promotional Considerations:

Louisiana Department of Transportation & Development Materials and Testing Section will receive the following promotional considerations:

- Twenty, 20, (:30 second) messages supporting DOTD's Storm Water Campaign. Messages will air Sunday through Saturday during prime-time and How-to programming, June 30, 2018 through June 29, 2019.
- Twenty, 20, (:30 second) BONUS messages supporting DOTD's Storm Water Campaign, also airing Sunday through Saturday during prime-time and How-to programming, June 30, 2018 through June 29, 2019.
- Messages should air, 3-4 per month, over the year-long schedule.
- One (1) "In Good Company" feature article in LPB Visions magazine (August 2018).
- Acknowledgement in the underwriter's section of Visions as a general support underwriter.
- Acknowledgement in the underwriter's section of LPB.org.
- Louisiana Department of Transportation & Development website will be linked to LPB.org.

Preemptions:

Due to LPB's commitment to serve the community, dates and times of programs, repeats and underwriter acknowledgments are subject to change or cancellation without notice. When reasonably possible, LPB will reschedule the underwritten program to include applicable underwriter credits.

Louisiana Department of Transportation & Development/FELPB Agreement 2018-2019 cont'd (Page 2 of 2)

Cancellation Option:

The underwriter has the option to cancel this agreement after a minimum of 90 days from the date of the first airing, by providing a minimum of 30 days prior written notice of cancellation. During the 30 day period, LPB may continue to air the credits and the underwriter will be obligated for the contract amounts through the date of termination.

Contract Amount / Payment:

The Louisiana Department of Transportation & Development Materials and Testing Section agrees to pay the sponsorship rate of $1,500 NET for sponsorship package listed on page one of this agreement. The sponsor agrees to remit invoice(s) within 30 days of invoiced date(s).

TOTAL AMOUNT: $1,500.00 NET-May 2019

Default:

If the underwriter fails to make any payment when due, FELPB may, in addition to other remedies, discontinue airing any or all credits.

No Warranties:

The underwriter is solely responsible for selecting the program(s) it wishes to underwrite, and FELPB makes no warranties, implied or express, regarding such program(s).

By the signatures below, the sponsor and FELPB agree to perform the mutual obligations as outlined above in accordance with all terms and conditions of this sponsorship agreement.

Effective Date: June 30, 2018

End Date: June 29, 2019

Sponsor approval by: _____ Date: 6/19/18

Witness: _____ Date: _____

Foundation for Excellence in LPB approval by: _____ Date: 06-20-18

Witness: _____ Date: 6-20-18

Video Source / Audio Source	CART / Tape/Cut	Type	Title / Sub-Title	Length	Available From/To	DAYS	Notes
LGS12-15		GS	GSA: DOTD-LA DEPT OF TRANSP & DEV	00:30:04	07/16/18	SMTWTFS	LUC DV 2006-2007
LGS12-15	0012/15		DOTD MATERIALS & TESTING SECTION		06/29/19	YYYYYYY	UPDATED 6/30/2014

Sat	01/06/2018	at 14:59:29	for 00:00:30:04	LPB
Thu	01/11/2018	at 19:59:29	for 00:00:30:04	LPB
Sat	01/13/2018	at 09:29:29	for 00:00:30:04	LPB
Tue	01/16/2018	at 19:59:29	for 00:00:30:04	LPB
Sat	01/20/2018	at 08:59:29	for 00:00:30:04	LPB
Tue	01/23/2018	at 19:59:29	for 00:00:30:04	LPB
Sat	01/27/2018	at 15:59:15	for 00:00:30:04	LPB
Tue	01/30/2018	at 21:59:29	for 00:00:30:04	LPB
Sat	02/03/2018	at 08:59:29	for 00:00:30:04	LPB
Tue	02/06/2018	at 21:59:29	for 00:00:30:04	LPB
Sat	02/10/2018	at 10:29:14	for 00:00:30:04	LPB
Sun	02/11/2018	at 21:59:29	for 00:00:30:04	LPB
Sat	02/17/2018	at 10:29:29	for 00:00:30:04	LPB
Sun	02/18/2018	at 18:59:14	for 00:00:30:04	LPB
Sat	02/24/2018	at 15:59:29	for 00:00:30:04	LPB
Tue	02/27/2018	at 19:59:29	for 00:00:30:04	LPB
Sat	03/03/2018	at 12:29:29	for 00:00:30:04	LPB
Thu	03/08/2018	at 21:59:29	for 00:00:30:04	LPB
Sat	03/10/2018	at 15:59:29	for 00:00:30:04	LPB
Sat	03/17/2018	at 13:59:29	for 00:00:30:04	LPB
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Sat	03/24/2018	at 13:29:29	for 00:00:30:04	LPB
Thu	03/29/2018	at 19:59:12	for 00:00:30:04	LPB
Sat	03/31/2018	at 10:59:29	for 00:00:30:04	LPB
Sun	04/01/2018	at 21:29:29	for 00:00:30:04	LPB
Sat	04/07/2018	at 09:59:29	for 00:00:30:04	LPB
Thu	04/12/2018	at 19:59:12	for 00:00:30:04	LPB
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Tue	05/15/2018	at 20:59:14	for 00:00:30:04	LPB
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Tue	05/22/2018	at 20:59:29	for 00:00:30:04	LPB
Sat	05/26/2018	at 12:29:29	for 00:00:30:04	LPB
Sun	05/27/2018	at 21:59:29	for 00:00:30:04	LPB
Sat	06/02/2018	at 07:59:29	for 00:00:30:04	LPB
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Tue	06/26/2018	at 18:59:29	for 00:00:30:04	LPB
Wed	07/18/2018	at 21:59:29	for 00:00:30:04	LPB

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Fri	07/20/2018	at 18:59:29	for 00:00:30:04	LPB
Sat	07/21/2018	at 09:59:29	for 00:00:30:04	LPB
Sat	07/21/2018	at 15:59:29	for 00:00:30:04	LPB
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This item appeared 99 times between 01/01/2018 and 12/31/2018.

VISIONS

FOR FRIENDS OF LPB • AUG. 2018
VOLUME 42, ISSUE 8

BETTY WH

First Lady of Television

DIONNE WARWICK: Then Came You

IN GOOD COMPANY

A CLEARER PICTURE: STORMWATER

LOUISIANA'S ON THE MOVE... DOTD BUILDS THE WAY

Picture this: a beautiful sunny summer day - everyone around the neighborhood is carrying out daily/weekly routines. People are watering and fertilizing lawns, some washing their vehicles, and others walking their pets. To the common eye, these are seemingly perfect activities on a great day, right? Let's take a moment to look a little deeper into how these activities can affect stormwater.

Stormwater is water that originates from precipitation events such as rain and snow/ice melt. It flows over land, streets, parking lots, etc. directly into storm drains and/or waterways. So why is keeping stormwater clean so important you may ask? Unlike wastewater, stormwater does not go through a treatment system prior to entering storm drains and waterways, so that means it's untreated, unfiltered water.
Fertilizers and washing detergents may contain chemicals or reagents that are not necessarily safe for the environment. If it rains, the runoff eventually makes its way into the nearest storm drain or waterway. This can cause harm to marine life and water quality. Some companies are turnin to environmental safe and natural produc to assist with these issues.

How can you help? Pet owners can help by picking up and disposing of pet waste properly. A few keys to protecting stormwater is being mindful of products used during routine activities. Everyone can make a difference in the campaign to minimize pollutants entering waterways with stormwater. Little things can have a great impact toward the ultimate goal. We all can take responsibility making sure we take the necessary precautions and keepin others informed. Remember, "Only Rain the Drain."

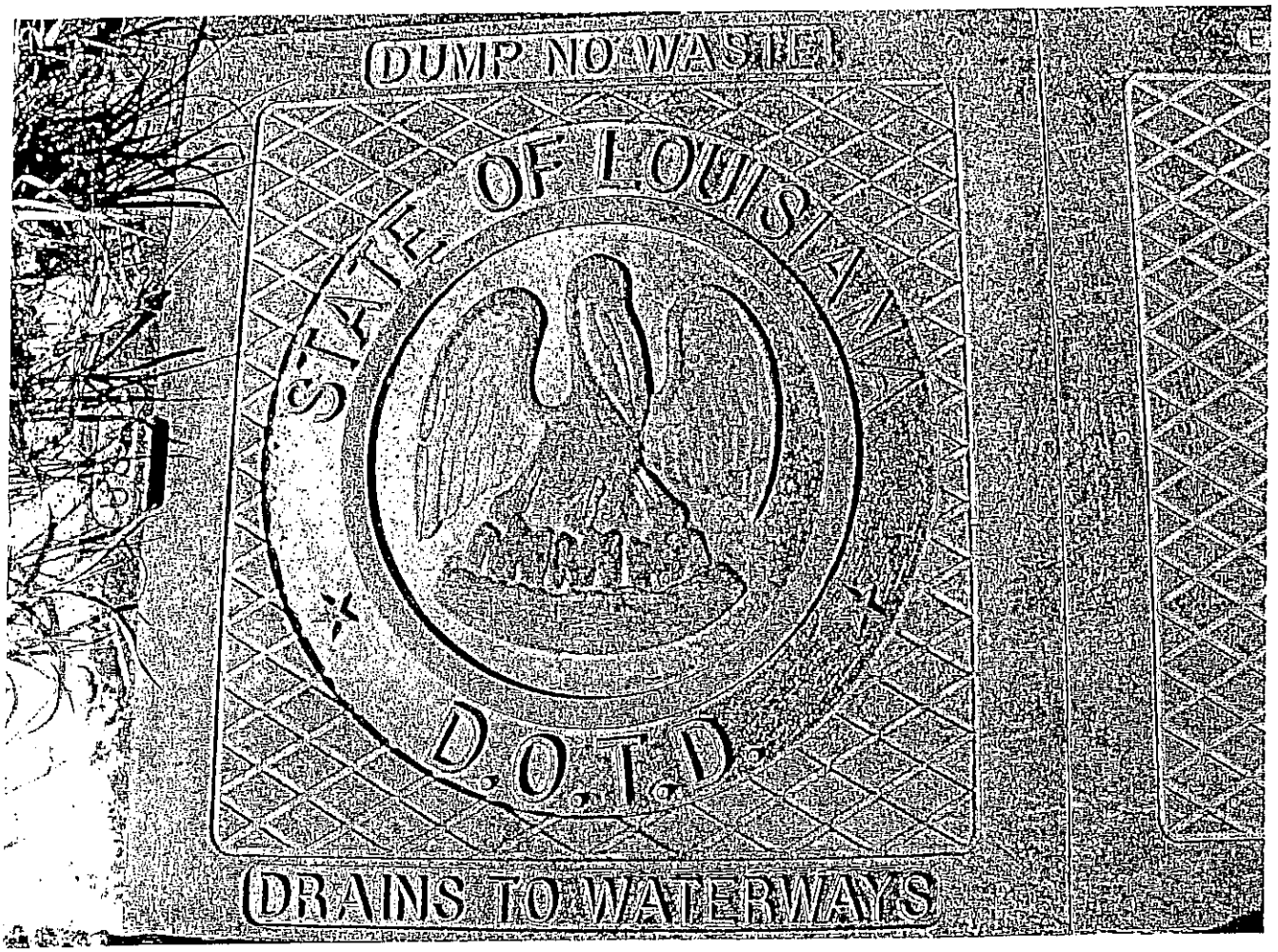
For more information about stormwate visit: wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Materials_Lab/MS Pages/default.aspx .

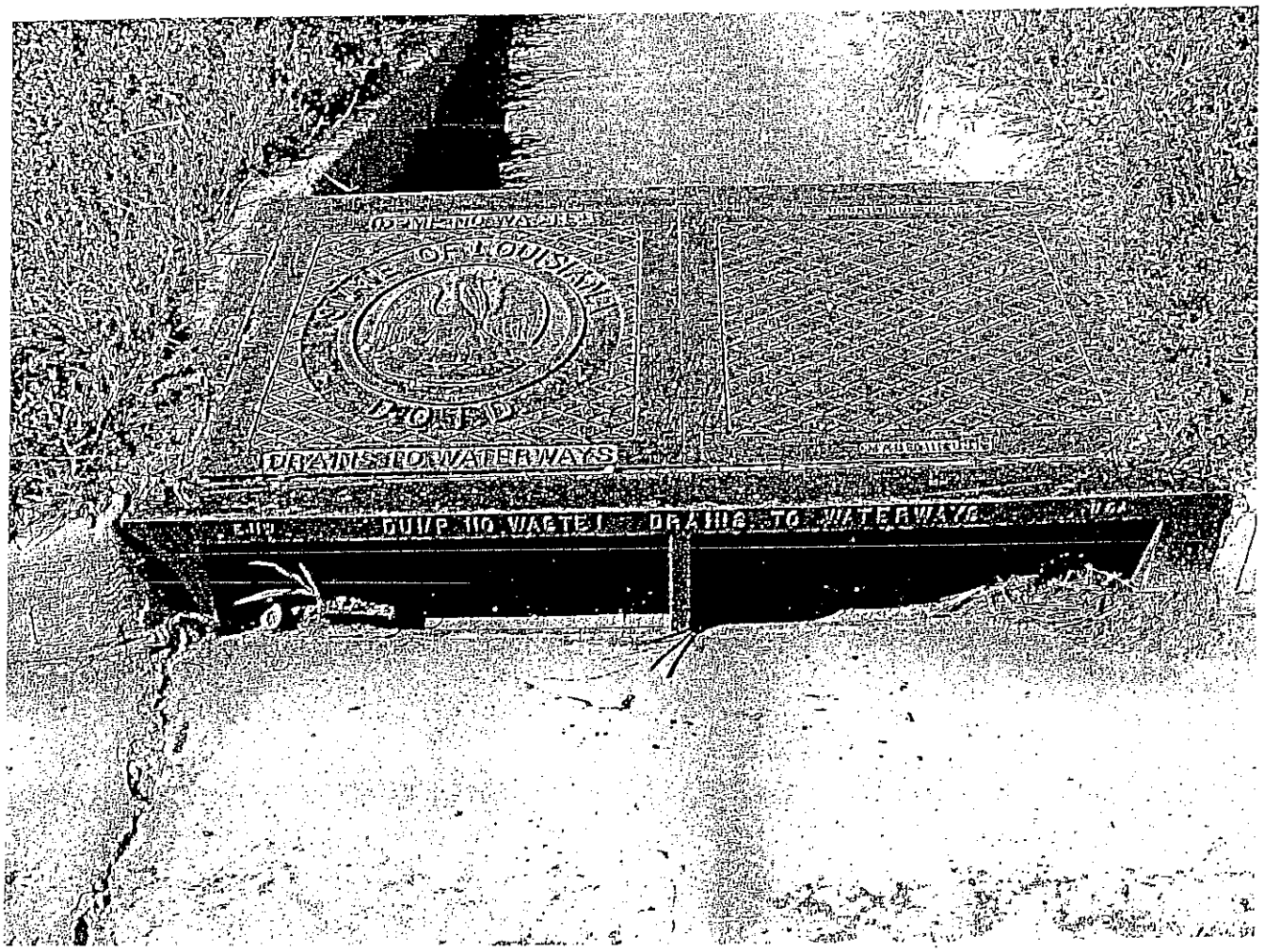
MEETINGS

FRIENDS OF LPB - TUESDAY, AUGUST 7 AT 11:30AM
LETA - FULL BOARD: THURSDAY, AUGUST 9 AT NOON

Appendix E

Catch Basin Cover Photograph


DUMP NO WASTE
STATE OF LOUISIANA
D.O.T.D.
DRAINS TO WATERWAYS


DUMP NO WASTE
STATE OF LOUISIANA
D.O.T.D.
DRAINS TO WATERWAYS

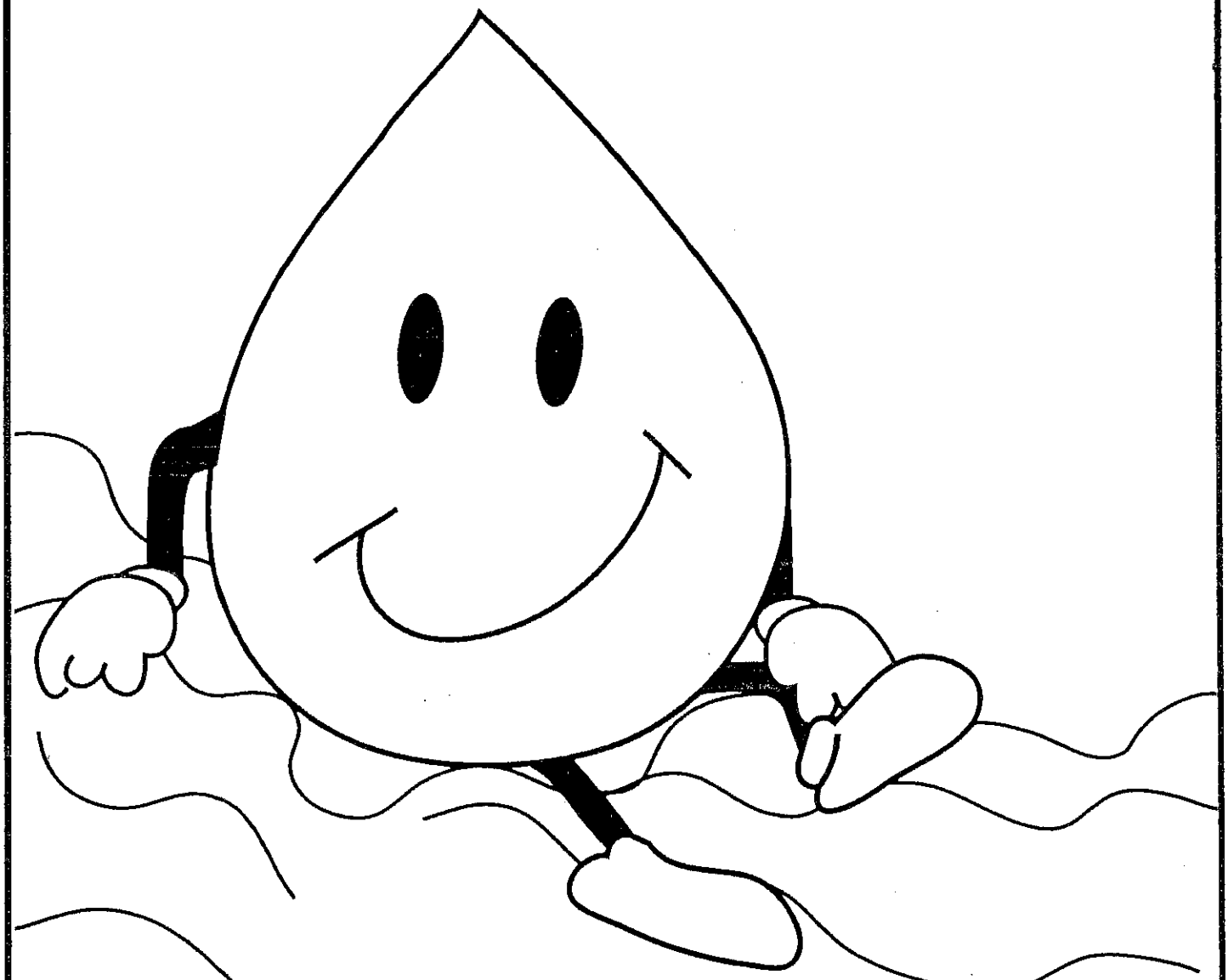
Appendix F

Educational Materials Packets

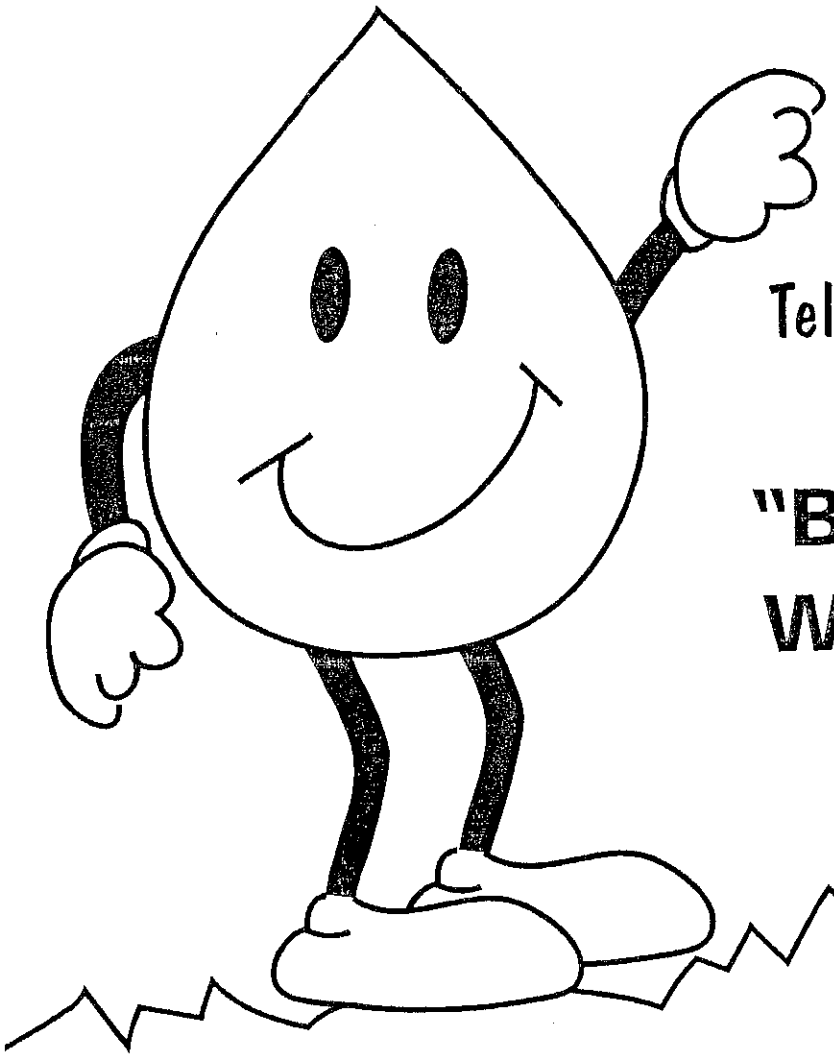
ACTIVITY BOOKLET

Be a Solution to Water Pollution

ACTIVITY BOOK



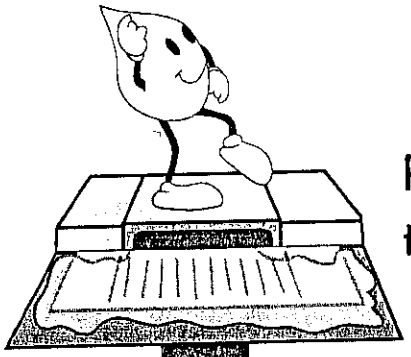
Have you ever walked next to a stream and seen trash floating in the water? Do you know how it gets there? Every time it rains, the water runs off the land and picks up pollutants such as dirt, oil, pet waste, litter, trash, pesticides and fertilizers. This polluted water flows into street drains and ditches that eventually drain to waterways. Never dump anything that you would not want to drink or swim in on the ground, in the street or down a storm drain. It will go into a river, lake or stream.



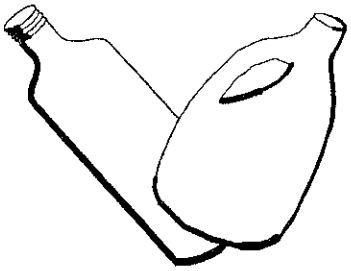
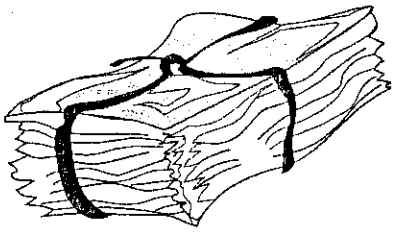
Tell your friends and family how they can...

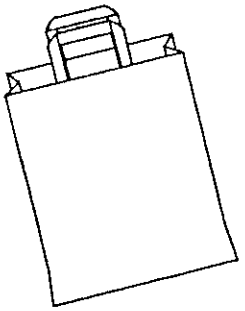
"Be a Solution to Water Pollution"

Waterdrops go through an amazing journey to get to streams and creeks.

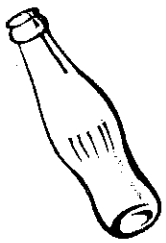
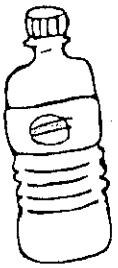


Please help this raindrop to find his way home through the drain and into the nearest river.

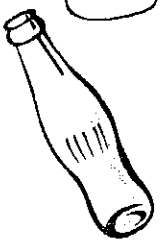





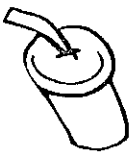

We can "Be a Solution to Water Pollution" by recycling cans, bottles, milk jugs, plastic bags and newspapers at home or in school.

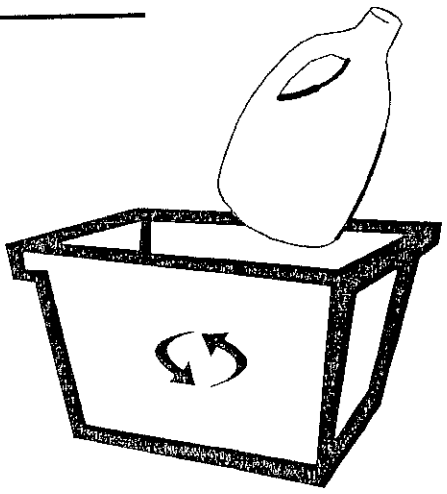
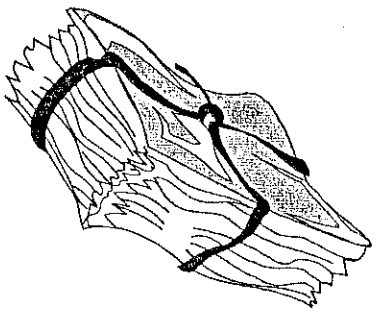
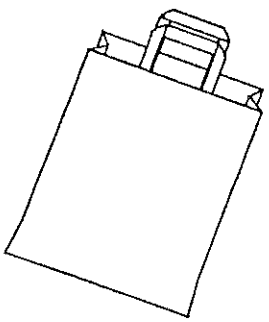



Below is a list of scrambled words, which stands for items that can be recycled.

1. wspeprane _____
2. lsgas _____
3. ttlesob _____
4. slaptic _____
5. likm sugj _____
6. ulamniunm acns _____

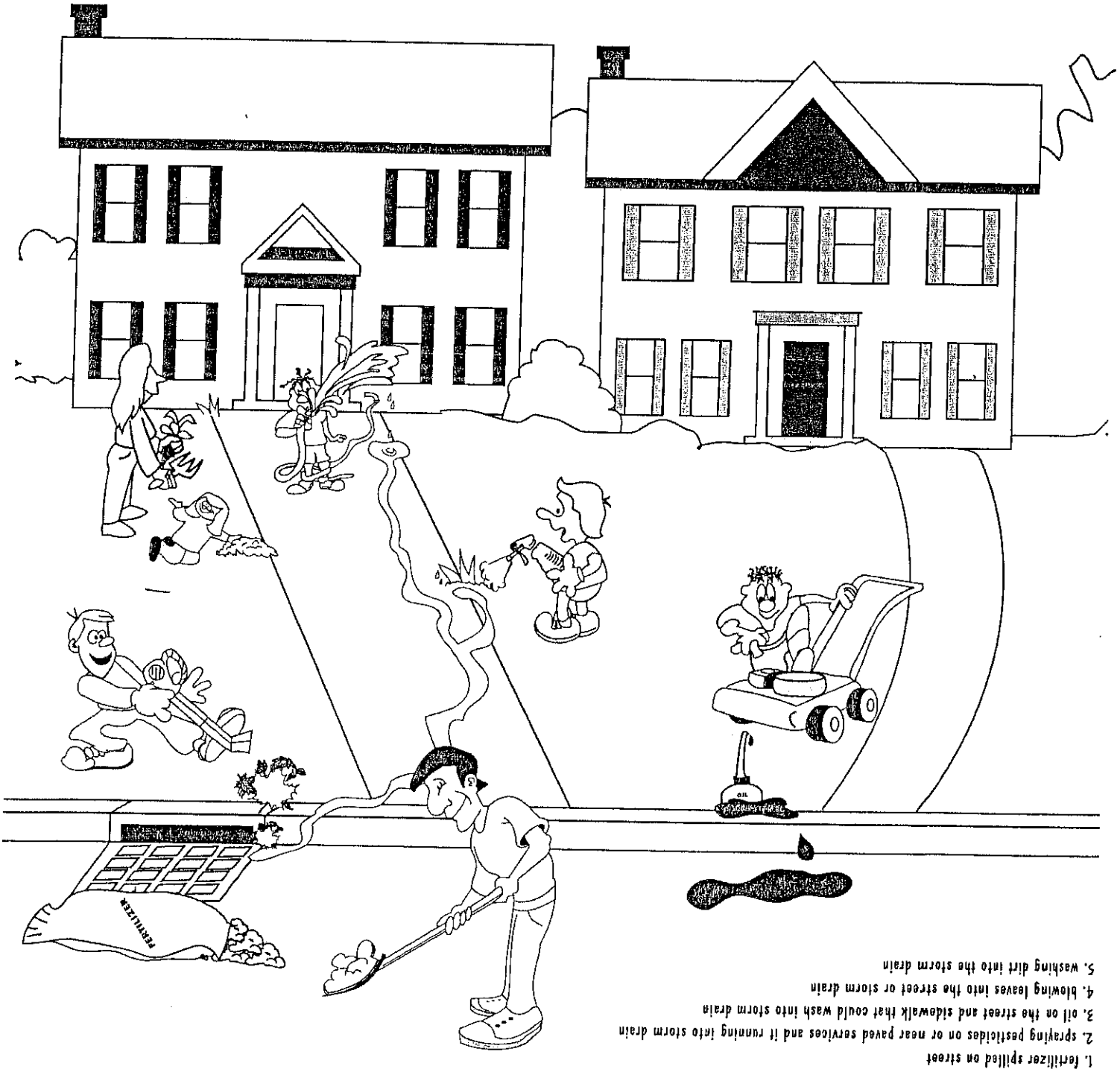



Answers: 1. newspaper, 2. glass, 3. bottles, 4. plastic, 5. milk jugs, 6. aluminum cans

Working in the garden or on a lawn is a fun activity to do with grown-ups. When helping to clean a yard, remember not to dump anything down a storm drain or in the street. Can you find what is wrong with this picture?

Circle the mistakes that the people in this drawing are making.

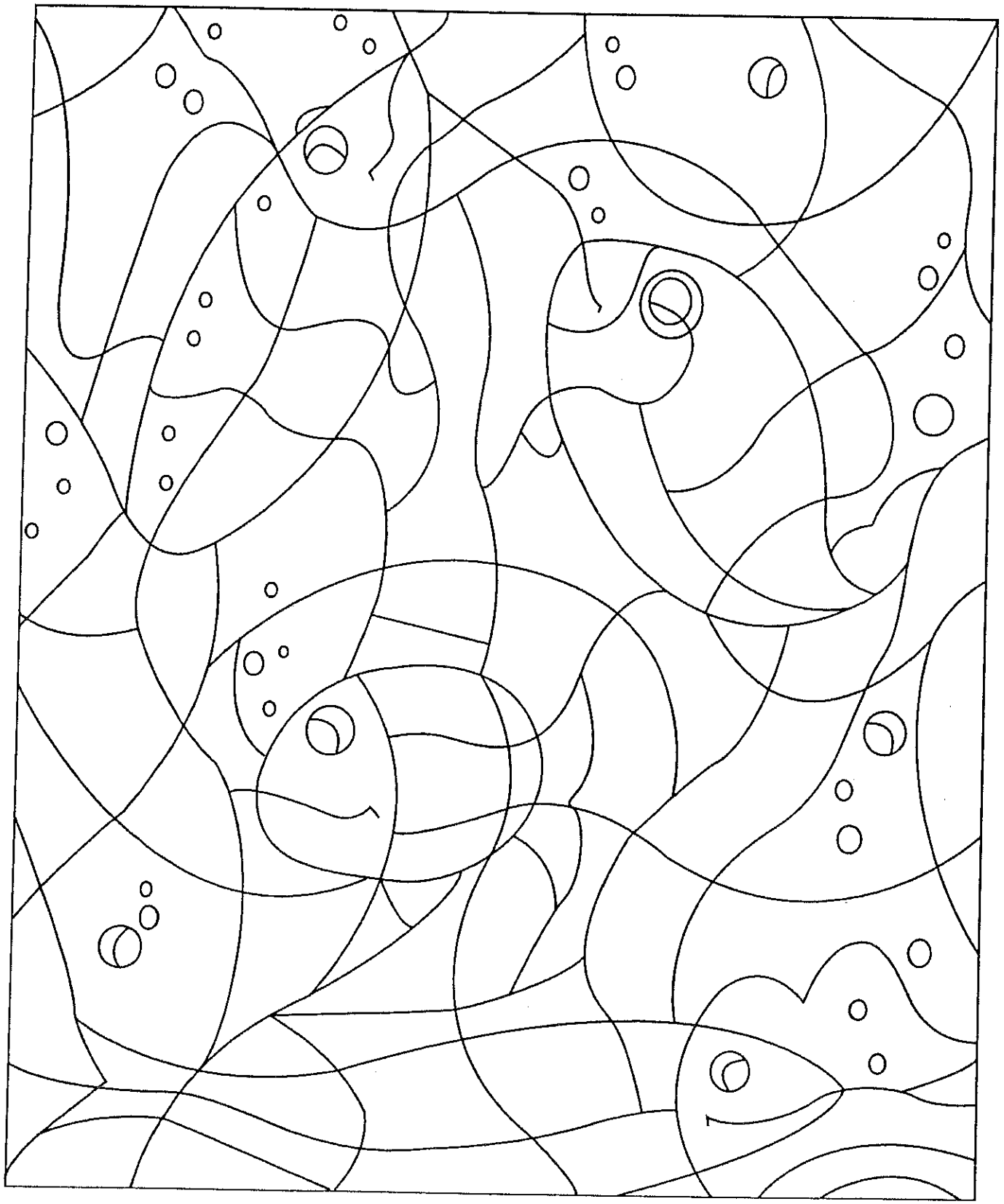


Answers:
1. fertilizer spilled on street
2. spraying pesticides on or near paved services and it running into storm drain
3. oil on the street and sidewalk that could wash into storm drain
4. blowing leaves into the street or storm drain
5. washing dirt into the storm drain

It is important to cleanup after your dog. Every time it rains, "poop" is collected by rainwater and dumped into a nearby storm drain or into a river, lake or stream. Carry a plastic or paper bag with you to pick-up after dogs and throw it in the trash.

Fish and other aquatic life rely on clean water. Plastic bags, oil, other chemicals and other pollutants cause harm to fish.

Find the fish and color them in.



Can you find all of the things in the creek that do not belong?

Good job! Ask your parent, teacher or troup leader to help you cut out your badge.

LOUISIANA DEPARTMENT OF
TRANSPORTATION & DEVELOPMENT

For additional information please visit our website at

http://www.dotd.la.gov/highways/construction/lab/ms4/home.asp

or contact

Louisiana Department of Transportation & Development

Materials and Testing Section

5080 Florida Blvd.

Baton Rouge, LA 70806

Phone: 225-248-4141

You too can help! Please visit

DOTD Adopt-A-Road Program:
http://www.dotd.la.gov/programs_grants/adopt/home.aspx

Keep Louisiana Beautiful:
http://keeplouisianabeautiful.org/

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Clean Water Campaign

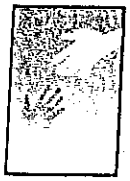
40 Courtland Street, NE

Atlanta, GA 30303

Email: info@cleanwatercampaign.com

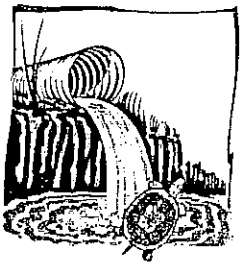
Website: http://www.cleanwatercampaign.com/html/index.htm

STICKERS



GIVE WATER A HAND

DIRT IN THE DRAIN

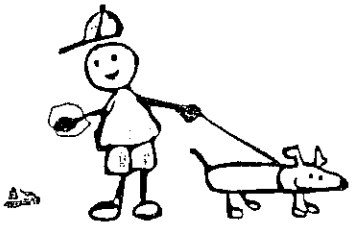


TURTLES COMPLAIN

Wave of the Future!

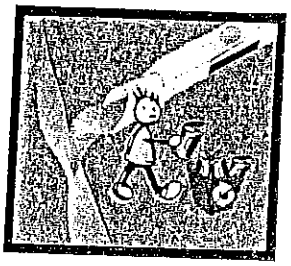
Will We Swim In It?

Clean Water

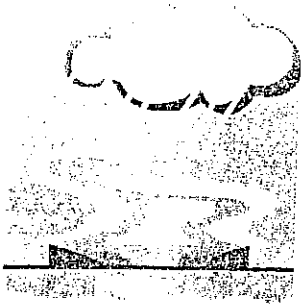


I Can Help!

MAKE A SPLASH



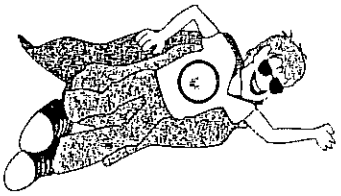
CLEAN UP YOUR TRASH



WHEN IT RAINS

Muck! Yuck!

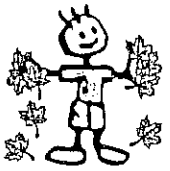
Sad Duck



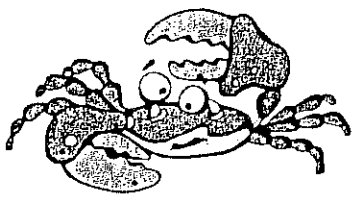
I'm a

CLEAN WATER ACTION HERO

Leaves don't belong in the stormdrain

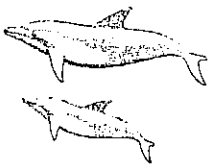


Junk from the Gutter



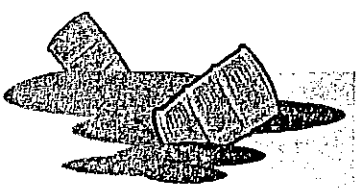
Makes us Sputter

Please Don't Pour



That's Our Front Door

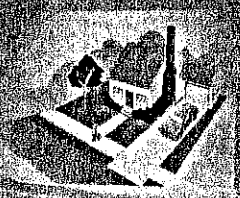
Oil & Water

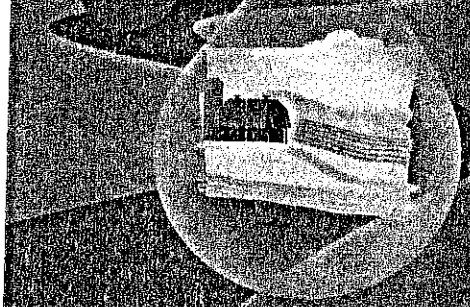


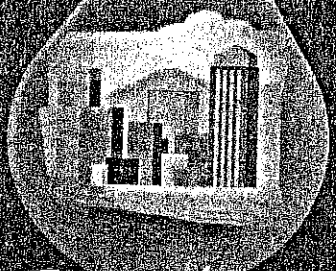
Please Don't Mix!

BOOKMARK

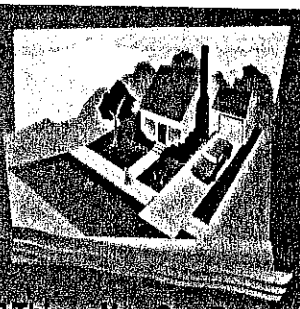
Clean Water







Everybody's Business



10 Things You Can Do to Prevent Stormwater Runoff Pollution

- Use fertilizers sparingly and sweep up driveways, sidewalks, and gutters
- Never dump anything down storm drains or in streams
- Vegetate bare spots in your yard
- Compost your yard waste
- Use least toxic pesticides, follow labels, and learn how to prevent pest problems
- Direct downspouts away from paved surfaces; consider a rain garden to capture runoff
- Take your car to the car wash instead of washing it in the driveway
- Check your car for leaks and recycle your motor oil
- Pick up after your pet
- Have your septic tank pumped and system inspected regularly

EPA United States Environmental Protection Agency

For more information, visit
www.epa.gov/nps or
www.epa.gov/npdes/stormwater

Appendix G

Public Records Request Form

Louisiana Department of Transportation and Development
PUBLIC RECORDS REQUEST FORM

http://www.dotd.la.gov

Date:___/___/___

STEP 1: **COMPLETE** all information in the fields provided. **Please TYPE** or **PRINT**. If you have questions, please call the Customer Information Line, at (225) 242-4609.

STEP 2: **SUBMIT** completed form by either U.S. First Class Mail to DOTD Custodian of Records, HQ – EW 3rd Floor, P.O. BOX 94245, Baton Rouge, LA 70804-9245, by fax to (225) 242-4690 or by emailing your request to: dotdpublicrecords@la.gov. **DO NOT ATTACH PAYMENT WITH THIS FORM.**

STEP 3: **WAIT** to receive a notice of estimated costs. Once received, send payment (Check or money order ONLY). Copies will be mailed upon receipt of payment or copies can be picked-up with payment. If 10 (ten) working days pass after notice is sent and payment is not received, it will be necessary to initiate a new request.

NAME: _____

COMPANY/FIRM: _____

MAILING ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

TELEPHONE NO.: (____) ____ - _____ FX.: (____) ____ - _____

EMAIL ADDRESS: _____

ROUTE/HWY (No street names): _____

PROJECT- LEGACY- R/O/W NO.: _____

DOTD CONTACT NAME: _____

Payment Method & Authorization

CHECK OR MONEY ORDER ONLY

Duplication Fees

Regular rate:	$0.25 per page (8½X11 & 8½X14)
Spec Sheets:	$0.50 per page (11X17)
Plan sheets:	$1.10 per page (24X36)
CDs or Disks:	$5 per disk + $25 per Hr. data processing fee

***Research may require additional fees**

Requestor Information (Please Type or Print)

To expedite your request, be as specific as possible. Attach additional pages to the form as necessary. Include street address of the facility, the document dates, and other details about the type of record of interest to you. Official R/O/W maps are located at the Parish District Court. ** **Due to the large volume of some state project records, it may be necessary for the custodian to take additional time to accumulate the info from all sections. In this case, it is required that the requestor review the records to be duplicated .**

Appendix H

MS4 Outfall Survey & Illicit Discharge Visual Screening Form

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

Illicit Discharge Visual Screening

Date: _____ Investigator: _____

Municipality: _____ Outfall ID: _____

Location: _____

Discharge at time of inspection: ☐Yes ☐No Photo taken: ☐Yes ☐No Photo #: _____

If YES, complete section A. If NO, skip section A and complete section B.

Section A-Discharge Present

Odor	☐Yes ☐No	
Foam	☐Yes ☐No	
Color	☐Yes ☐No	
Sheen	☐Yes ☐No	
Turbid	☐Yes ☐No	
Floatables	☐Yes ☐No	
Vegetation	☐Yes ☐No	
Smoke/Vapor	☐Yes ☐No	

Source of Illicit Discharge: _____

Address: _____

Section B-No Discharge Present

Is there any evidence of previous illicit discharge? ☐Yes ☐No

If YES, please describe below.

Potential Source of Illicit Discharge: _____

Address: _____

Section C

Comments

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: _____ Investigator: _____

Parish: _____ Municipality: _____

Route: _____

FIELD DATA

Outfall ID: _____

Location/Address: _____

_____

Latitude: _____ Longitude: _____

Receiving Water: _____ Impaired: ☐Yes ☐No

Land Use:

☐Industrial ☐Residential ☐Commercial ☐Open Space ☐Other: _____

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type		Material Type	
Pipe Height		Depth	
Pipe Width		Width	
NOTES			

Photo: ☐Yes ☐No Photo number: _____

Appendix I

Illicit Discharge Detection and Elimination Training Form, Employee Quiz & Wastewater Recertification Agenda

IDDE a grate concern

Acknowledgment of Training

(This top section should be filled in by the trainer)

Signature(s) below are acknowledgment that on (date)_____,
these individuals participated in a training session at the:

Location Name: _____

Address: _____

Given by: (trainer's name) _____

(title) _____

This training session presented information on illicit discharge detection and elimination. During this session, the individuals listed below viewed the training video:

IDDE: a grate concern

The participants' signatures below affirm they were given adequate time to ask questions about their particular job activities and how they could best conduct these activities.

Please read the above paragraph before signing below.

PRINT NAME HERE	SIGNATURE HERE

IDDE
a grate concern

Employee Quiz

Name _____

Dept. _____ Date _____

The following questions all have multiple choice answers. Please circle the best answer for each question.

1. Pure stormwater run-off...
   a. is cloudy.
   b. is foamy.
   c. is clear and bright.
   d. has a rainbow sheen.
   e. all of the above

2. What information about a suspected illicit discharge would not be useful to collect and report?
   a. weather conditions
   b. date and time
   c. location
   d. description of the discharge

3. How long after the last significant rainfall should flow in a stormwater outfall make you suspicious?
   a. 1 hour
   b. 8 hours
   c. 1 day
   d. 2-3 days

4. Municipal separate storm sewer systems are designed to perform only the following function:
   a. clean-up stormwater run-off
   b. control and divert stormwater run-off
   c. treat stormwater run-off
   d. treat sanitary wastes

5. Which of the following materials are common illicit discharges?
   a. pet wastes
   b. grass clippings
   c. paint wastes
   d. trash
   e. all of the above

6. Which of the following materials should never be disposed in a non-leak tight outdoor dumpster or trash can?
   a. paper and plastic
   b. any liquids
   c. floatables
   d. broken concrete

7. Which of the following would be suspicious if observed at a stormwater outfall?
   a. vapors or fumes
   b. dead or dying vegetation
   c. discolored water
   d. all of the above

8. What does a 'rainbow sheen' on stormwater indicate?
   a. a recent rain storm
   b. waste paint
   c. gasoline
   d. sewage contamination

9. Which of the following types of operations can be a source of illicit discharges?
   a. private homes
   b. industrial facilities
   c. restaurants
   d. municipal facilities
   e. all of the above

10. A stained storm drain inlet is probably a sign of...
    a. recent MS4 maintenance work.
    b. a marking to indicate it needs repair.
    c. past illicit discharges.
    d. dye testing.

11. Everything that enters an MS4 eventually winds up in...
    a. a sanitary sewer treatment works.
    b. an underground aquifer.
    c. a drinking water treatment plant.
    d. a stream, river, lake or bay.

12. Which of the following are allowed in municipal separate storm sewer systems (MS4s)?
    a. rainwater run-off
    b. sanitary wastes from hospitals and long-term care facilities
    c. milk
    d. floor mat rinse water

13. What is the most likely illicit discharge from a construction site?
    a. silt and sediments
    b. waste oil
    c. floatables
    d. pet wastes
    e. waste pesticides

14. A suspected illicit discharge from which of the following types of operations would not need to be reported?
    a. apartment complex
    b. retail shopping center
    c. service station
    d. public park
    e. report all of them

15. What could cause a strong odor at a stormwater outfall?
    a. sanitary sewage
    b. garbage
    c. gasoline
    d. any of the above

Wastewater Recertification

Topics for Discussion

Wednesday, August 29, 2018

Topic	Time
Introduction, Agenda *Mr. Joubert Harris*	8:00 - 8:15 a.m.
Program Update *Mr. John Holdcraft*	8:15 - 8:30 a.m.
Groundwater Protection and Your Septic System *Ms. Kenya Lewis*	8:30 - 9:15 a.m.
EPA Drinking Water and Health: What You Need To Know *Mr. Nicholas Larks*	9:15 - 10:00 a.m.
Stormwater Video *Ground Control*	10:00 - 10:30 a.m.
Combined Sewer Overflows *Ms. Nikita Simon*	10:30 - 11:15 a.m.
Stormwater Inspections: What to Expect When You're Inspecting *Mr. Roy Lowery*	11:15 - 12:00 p.m.
Lunch Break	***12:00 - 1:00 p.m.***
Sand Filters *Mr. Nicholas Larks*	1:00 - 1:45 p.m.
Working With Nature to Purify Sewage *Ms. Kenya Lewis*	1:45 - 2:30 p.m.
Stormwater Video *Illicit Discharge Detection & Elimination*	2:30 - 3:00 p.m.
Health Hazards Due to Wastewater Exposure *Ms. Nikita Simon*	3:00 - 3:45 p.m.
Fracking Effects on Wastewater *Mr. Roy Lowery*	3:45 - 4:30 p.m.
Open Forum, Quiz Recap, Closing Remarks	4:30 - 4:45 p.m. 4:45 - 5:00 p.m.

Appendix J

Construction Inspection Forms

&

Construction Stormwater Field Guide

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
STORM WATER POLLUTION PREVENTION PLAN
Inspection and Maintenance Report Form

Erosion Control Measures

To be completed every 7 days and within 24 hours of a rainfall event of 0.5 inches or more

nspector _____ Date _____

S.P. No. _____ FAP No. _____

Contractor _____ Route _____

Days Since Last Rainfall: _____ Amount of Last Rainfall _____ inches

Station No.	Lt./Rt.	Type	Does Silt Need Removal ?	Is Erosion Item Stable ?	Is There Evidence Of Washout or Over-Topping ?	Condition & Comments on Effectiveness

aintenance required for Erosion Control Measures:

be performed by: _____ On or Before: _____

›es of Measures:

Silt Fence
Hay/Straw Bales
Hay Check Dam
E - Sediment Basin
F - Slope Drain
G- TemporarySeeding
I - Matting
J - Other

Louisiana Department of Transportation and Development
Storm water Construction Site Inspection Report

General Information			
Project Name			
Permit Number		Location	
Date of Inspection		Start/End Time	
Inspector's Name			
Inspector's Title			
Inspector's Contact Information			
Describe present phase of construction			
Type of Inspection ☐ Regular ☐ Pre-storm event ☐ During storm event ☐ Post-storm event ☐ Other			
Weather at time of inspection?			

Records			
NOI available, if applicable? ☐Yes ☐No	Permit available? ☐Yes ☐No	Current SWPPP? ☐Yes ☐No	Current site map? ☐Yes ☐No
Are the self inspections current? ☐Yes ☐No	Date of last self inspection:		
Corrective action log available? ☐Yes ☐No			

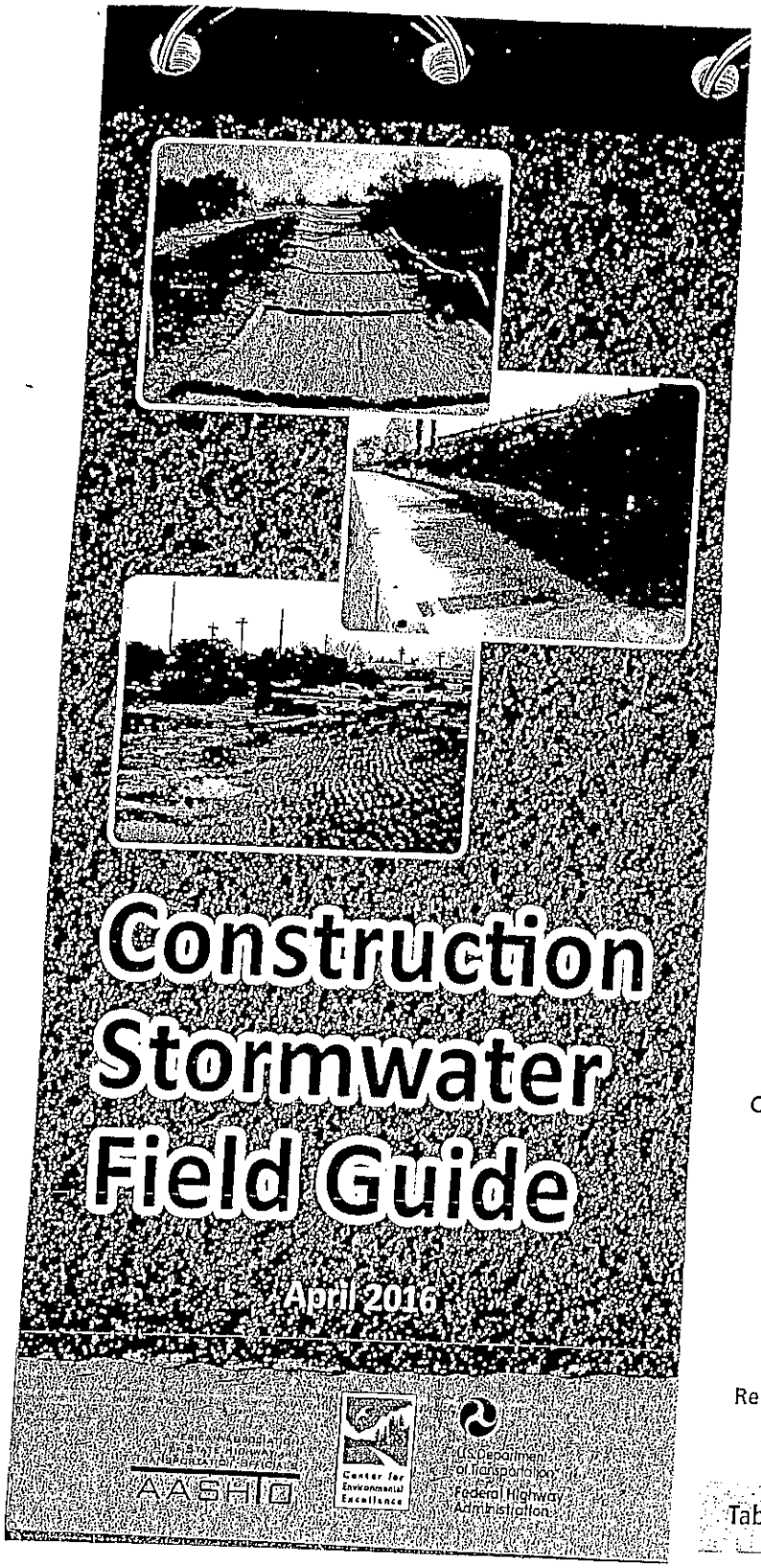
Site Specific BMPs				
	BMP Description	BMP Installed & Operating Properly?	Corrective Action Needed	Proposed date for corrective action & responsible person
1		☐Yes ☐No		
2		☐Yes ☐No		
3		☐Yes ☐No		
4		☐Yes ☐No		
5		☐Yes ☐No		
6		☐Yes ☐No		
7		☐Yes ☐No		
8		☐Yes ☐No		
9		☐Yes ☐No		
10		☐Yes ☐No		
11		☐Yes ☐No		
12		☐Yes ☐No		
13		☐Yes ☐No		

Overall Site Features					
	BMP/activity	Implemented?	Maintained?	Corrective action Needed	Proposed date for corrective action & responsible person
1	Are all slopes & disturbed				

	stabilized?	☐Yes ☐No	☐Yes ☐No		
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☐Yes ☐No	☐Yes ☐No		
3	Are perimeter controls & sediment barriers adequately installed and maintained?	☐Yes ☐No	☐Yes ☐No		
4	Are discharge points and receiving waters free of sediment deposits?	☐Yes ☐No	☐Yes ☐No		
5	Are storm drain inlets properly protected?	☐Yes ☐No	☐Yes ☐No		
6	Is there evidence of sediment being tracked into the street?	☐Yes ☐No	☐Yes ☐No		
7	Is trash/litter from work areas collected and placed in covered dumpsters?	☐Yes ☐No	☐Yes ☐No		
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐Yes ☐No	☐Yes ☐No		
9	Are vehicle & equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☐Yes ☐No	☐Yes ☐No		
10	Are materials that are potential stormwater contaminants stored inside or under cover?	☐Yes ☐No	☐Yes ☐No		
11	Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	☐Yes ☐No	☐Yes ☐No		
12	Are there any discharges at time of inspection?	☐Yes ☐No	☐Yes ☐No		
13		☐Yes ☐No	☐Yes ☐No		
14		☐Yes ☐No	☐Yes ☐No		
15		☐Yes ☐No	☐Yes ☐No		

Notes

Inspector Certification	
Print Name:	
Signature:	
Date:	



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Appendix K

De-icing/Anti-icing Agents-Statewide

URBAN AREA MONTHLY USAGE:
AGGREGATE, LIGHTWEIGHT
(YD3 - Cubic Yard)

2018													
Urban Area	**January**	**February**	**March**	**April**	**May**	**June**	**July**	**August**	**September**	**October**	**November**	**December**	**2018 Total**
Abbeville Regulated Area							0.5		1.0	2.0		3.0	**6.5**
Baton Rouge Urbanized Area	16.0												**16.0**
Lafayette Urbanized Area				2.0	6.5	3.7	3.3	1.5	0.1		3.5		**20.6**
Lake Charles Urbanized Area	57.0		19.5	8.1	0.6	3.5	5.0	3.1	17.5	8.0	4.0	3.0	**129.3**
Mandeville-Covington Urbanized Are	60.4												**60.4**
Grand Total	**133.4**	**0.0**	**19.5**	**10.1**	**7.1**	**7.2**	**8.8**	**4.6**	**18.6**	**10.0**	**7.5**	**6.0**	**232.7**

Date Range: January 1, 2018 to December 31, 2018

MAINTENANCE UNIT MONTHLY USAGE:
AGGREGATE, LIGHTWEIGHT
(YD3 - Cubic Yard)

2018													
Location Conducting Operations	January	February	March	April	May	June	July	August	September	October	November	December	2018 Total
D02/G540 - BRIDGE MAINTENANCE/MAINT							1.5						1.5
D03/G510 - MAINTENANCE/RD MAINT		2.5	1.0		0.8	0.3				0.1		1.7	6.3
D03/G520 - MAINTENANCE/RD MAINT				2.0	6.5	3.7	3.3	1.5	0.1		3.5		20.6
D03/G560 - MAINTENANCE/RD MAINT							0.5		1.0	2.0		3.0	6.5
D03/G580 - MAINTENANCE/RD MAINT	0.1					0.5		8.5		0.3	3.0	1.5	13.8
D07/G510 - ROADWAY MAINT	57.0		19.5	8.1	0.6	3.5	5.0	3.1	17.5	8.0	4.0	3.0	129.3
D07/G520 - DERIDDER/MAINT	15.0												15.0
D07/G540 - JENNINGS/MAINT					2.5				1.0				3.5
D07/G570 - CREOLE/MAINT	25.0											0.5	25.5
D07/G580 - OBERLIN/MAINT		8.0											8.0
D62/G540 - MAINTENANCE/MAINT	16.0												16.0
D62/G570 - MAINTENANCE/MAINT	60.4												60.4
Grand Total	**173.5**	**10.5**	**20.5**	**10.1**	**10.4**	**8.0**	**10.3**	**13.1**	**19.6**	**10.4**	**10.5**	**9.7**	**306.3**

Date Range: January 1, 2018 to December 31, 2018

MAINTENANCE UNIT MONTHLY USAGE:

SALT, GRADE 1, 50 LB/SACK

2018				
	January	November	December	2018 Total
D02/G510 - WEST BANK MAINT/MAINT	468			468
D02/G520 - WEST BANK MAINT/MAINT	477			477
D02/G530 - EAST BANK MAINT/MAINT	325			325
D02/G540 - BRIDGE MAINTENANCE/MAINT	127			127
D02/G550 - BRIDGE MAINTENANCE/MAINT	90			90
D02/G570 - EAST BANK MAINT/MAINT	441			441
D02/G727 - DIST DRAINAGE RDWY/MAINT	1764			1764
D03/G510 - MAINTENANCE/RD MAINT	90			90
D03/G520 - MAINTENANCE/RD MAINT	175			175
D03/G540 - MAINTENANCE/RD MAINT	1458			1458
D03/G550 - MAINTENANCE/RD MAINT	417			417
D03/G560 - MAINTENANCE/RD MAINT	117			117
D03/G570 - MAINTENANCE/RD MAINT	439			439
D03/G580 - MAINTENANCE/RD MAINT	77			77
D03/G765 - ROADSIDE MAINT/RD MAINT	341			341
D04/G510 - ARCADIA/CASTOR UNITS	2182			2182
D04/G520 - HOMER UNIT/MAINT	1786			1786
D04/G530 - MINDEN/LETON UNITS	1097			1097
D04/G540 - BOSSIER/PLAIN DEALING	4417			4417
D04/G550 - SHREVEPORT/VIVIAN UNIT	6421			6421
D04/G560 - MANSFIELD UNIT/MAINT	820			820
D04/G570 - COUSHATTA UNIT/MAINT	1159			1159
D05/G510 - MAINTENANCE/MONROE	518	104		622

D05/G520 - MAINTENANCE/MONROE	816	5	3	**824**
D05/G530 - MAINTENANCE/MONROE	486			**486**
D05/G540 - MAINTENANCE/MONROE	354	70		**424**
D05/G550 - MAINTENANCE/MONROE	1922	575	80	**2577**
D05/G560 - MAINTENANCE/MONROE	735	147		**882**
D05/G570 - MAINTENANCE/MONROE	2353	294		**2647**
D05/G580 - MAINTENANCE/MONROE	176	20		**196**
D05/G590 - MAINTENANCE/MONROE	239	25		**264**
D05/G760 - CONCRETE REPAIR	1070			**1070**
D07/G520 - DERIDDER/MAINT	226			**226**
D07/G540 - JENNINGS/MAINT	442			**442**
D07/G570 - CREOLE/MAINT	2			**2**
D07/G580 - OBERLIN/MAINT	144			**144**
D07/G720 - BRIDGE MAINTENANCE	2516			**2516**
D08/G510 - MAINTENANCE/ALEX	1603	9		**1612**
D08/G520 - MAINTENANCE/MARKSVILLE	1284			**1284**
D08/G530 - MAINTENANCE/MANY	354			**354**
D08/G540 - MAINTENANCE/LEESVILLE	345			**345**
D08/G550 - MAINTENANCE/NATCHITOCHES	792			**792**
D08/G560 - MAINTENANCE/WINNFIELD	382			**382**
D08/G570 - MAINTENANCE/DRY PRONG	285			**285**
D08/G710 - DISTRICTWIDE ROAD MAINTENANCE	945			**945**
D08/G720 - BRIDGE MAINTENANCE/ALEX	170			**170**
D08/G750 - DISTRICTWIDE SIGN CREW	530			**530**
D08/G751 - DISTRICTWIDE ELECTRICIANS	100			**100**
D58/G510 - CALDWELL PRH/MAINT	343			**343**
D58/G520 - FRANKLIN PRH/MAINT	188			**188**
D58/G530 - TENSAS PRH/MAINT	114			**114**
D58/G540 - CATAHOULA PRH/MAINT	103			**103**
D58/G550 - CONCORDIA PR/MAINT	112			**112**

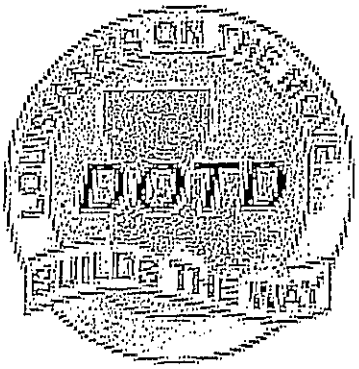
D58/G580 - LASALLE PRH/MAINT	231			**231**
D58/G720 - BRIDGES/MAINT	996			**996**
D61/G510 - PRH MAINT CREW/UNIT 2	2238			**2238**
D61/G520 - PRH MAINT CREW/UNIT 2	884			**884**
D61/G540 - PRH MAINT CREW/BR	1397			**1397**
D61/G550 - PRH MAINT CREW/BR	1030			**1030**
D61/G560 - PRH MAINT CREW/UNIT 2	925			**925**
D61/G580 - PRH MAINT CREW/UNIT 2	686			**686**
D61/G590 - PRH MAINT CREW/BR	885			**885**
D61/G765 - PRH MAINT ROADSIDE DEV/UNIT 5	4925			**4925**
D62/G530 - MAINTENANCE/MAINT	477			**477**
D62/G540 - MAINTENANCE/MAINT	1337			**1337**
D62/G550 - MAINTENANCE/MAINT	524			**524**
D62/G555 - MAINTENANCE/MAINT	384			**384**
D62/G560 - MAINTENANCE/MAINT	175			**175**
D62/G570 - MAINTENANCE/MAINT	1446			**1446**
D62/G580 - MAINTENANCE/MAINT	124			**124**
D62/G765 - ROADSIDE DEVELOPMENT	30			**30**
Grand Total	**63031**	**1249**	**83**	**64363**

Date Range: January 1, 2018 to December 31, 2018

Appendix L

Agile Assets System

LaGov Linear Assets (Agile) Users Guide



LaDOTD
Maintenance System Management
Section 42

June 2014

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INTRODUCTION

This guide provides step by step processes on using the menus and windows to access, manage and retrieve the asset data. This system comprises of 4 main modules and contains an extensive collection of asset data that can be retrieved easily.

The Linear Asset Management System is a versatile system that can be used from any computer with a browser and an internet connection.

However, for a better experience, it is recommended to have the following settings. These settings are only recommendations and do not imply that your experience will not be satisfactory if you use different settings.

Settings	Description
Browser	Internet Explorer 6 or above Firefox 3.0 or above Safari 3 or above
Screen Resolution	1024 x 768
Operating System	Windows XP SP2 or better
Memory	Windows 7: 1GB minimum Windows XP: 512MB minimum Windows Vista: 1GB minimum

This Guide was produced to assist you with your day to day work functions, if you would like to use the LaGov help scripts they are available from the DOTD's Intranet. Use the menu path below to begin:

DOTD Intranet / DOTD's LaGov Information Site / LaGov Help (Self-service) / LaGov ERP / LINEAR ASSETS

LOGGING IN TO AGILE

To Access the LEO Portal directly

1. Connect to the Internet

2. Type https://leo.doa.louisiana.gov/irj/portal and press Enter.
   OR
   From *louisiana.gov* (http://www.louisiana.gov/) under LEO: Louisiana State Employees Online Online Services click the link

3. Enter your User ID (e.g. P00123456).

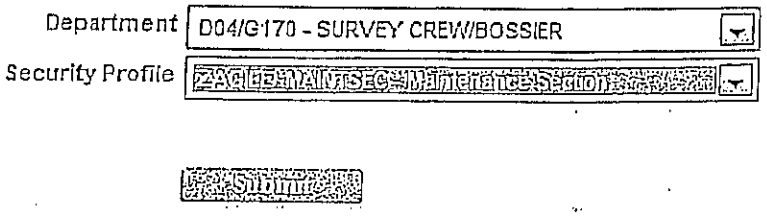
4. Enter current Password.

5. Click Log on

6. LaGov ERP ERP / LEO Home page is displayed.

7. Click Linear Assets (Agile) located at the top of the screen.

8. This will bring you to the Department and Security Profile



9. If you over see more than one Administration Unit, select the one you want to log in under the "Department" field. Check your Security Profile is correct.and click submit.

10. You have successfully logged in.

Appendix M

Hydraulics Manual Supplement

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

INTRADEPARTMENTAL CORRESPONDENCE

IN REPLY REFER TO FILE NO.

REFERRED TO

___ REFERRED FOR ACTION
___ ANSWER FOR MY SIGNATURE
___ FOR FILE
___ FOR YOUR INFORMATION
___ FOR SIGNATURE
___ RETURN TO ME
___ PLEASE SEE ME
___ PLEASE TELEPHONE ME
___ FOR APPROVAL
___ PLEASE ADVISE ME
___ _____

BY _____ DATE _____
BY _____ DATE _____
BY _____ DATE _____

HYDRAULICS OFFICE
(225)379-1306

MEMORANDUM

TO: ROAD DESIGN SECTION
BRIDGE DESIGN SECTION
CONSTRUCTION SECTION
DISTRICT ADMINISTRATORS
DISTRICT DESIGN OFFICES
ENVIRONMENTAL SECTION
PROJECT MANAGEMENT SECTION

FROM: Steve Lee, P. E.
Hydraulics Engineer Administrator

DATE: November 1, 2007

SUBJECT: DESIGN POLICY ON EROSION CONTROL

The attached documents are a re-issuance of LADOTD's Design Policy on Erosion Control with minor changes. An additional example has been added to the documentation. Also, the section entitled "Plan Checking & Design Procedures for Erosion and Sediment Control on LADOTD N/LPDES Permitted Project" was to be included in the Hydraulics Manual, and it is labeled as such; however, this information will not be included in the Hydraulics Manual as the Design Policy on Erosion Control is being updated periodically to correspond with changes in EPA and DEQ policy.

Further information can be obtained by contacting Sarah Golz in the Hydraulics Section at (225) 379-1430.

RECOMMENDED FOR APPROVAL _____ DATE _____

RECOMMENDED FOR APPROVAL _____ DATE _____

APPROVED _____ DATE _____

ROAD DESIGN

EROSION CONTROL GUIDELINES

HYDRAULICS UNIT

PLAN CHECKING AND DESIGN PROCEDURES FOR EROSION & SEDIMENT CONTROL

SUPPLEMENT TO HYDRAULICS MANUAL

NOVEMBER 20(

PLAN CHECKING & DESIGN PROCEDURES FOR EROSION & SEDIMENT CONTROL ON LA DOTD N/LPDES PERMITTED PROJECTS

This document pertains to those projects which fall under Phase I and Phase II of Louisiana's Pollutant Discharge Elimination System permitting program. The program applies to all construction projects disturbing one acre or greater of land as of March 2003.

Plan checking and design procedures on the use of erosion and sediment controls are to be followed according to the *Roadway Design Procedures and Details Manual (RDM)* with few exceptions as shown herein. A reference is made to section 4.5.2 of this manual and Standard Plan EC-01. Temporary erosion controls should be shown on the plan and construction sequence sheets, or on separate sheets altogether. This is a revision to section 8.2.5(h) of the RDM. Where many controls are required such that they would clutter the plans, the controls should instead, be listed in tables on summary sheets. Temporary erosion control symbols should be included as part of a plan symbol legend. Structural controls should have details for their installation included within the plans. Examples of structural (i. e., sediment) controls are silt fencing, sediment basins, check dams, etc. See Standard Plan EC-01. New products are continuously being developed to aid in erosion and sediment control. Products equivalent to the traditional ones mentioned in this document are acceptable as approved by the LADOTD.

Plan preparation procedures for separate, temporary erosion control sheets are also included. They should follow similar procedures to those discussed below for showing controls within the traditional plan set. The guidelines and procedures listed below are used to supplement, and may supersede, the RDM and Standard Plan EC-01.

PRELIMINARY DESIGN/PLAN CHECK

Roadside, median, and temporary ditches should have hay/straw or stone (or equivalent material) check dams placed in them. There are many options for the temporary stabilization of ditches. Construction personnel are allowed to make adjustments for field conditions. As a guideline, check dams should only be used in channels with a contributing drainage area of 10 acres or less. Additionally, they should only be placed in channels having a 10% grade or less, and where the depth of flow is not expected to exceed one (1) foot. Use hay or straw baled check dams where the maximum contributing drainage area is 2 acres. Use stone check dams where the drainage area is between 2 and 10 acres. (It will not be necessary to show such drainage areas on the Design Drainage Map.) The maximum spacing between dams should be such that the toe of the upstream dam is at the same elevation as the top of the downstream dam.

Check dams range from 1½ ft. to 3 ft. in height, depending on the channel cross-section or depth of flow. The height should be equal to the top of the lower channel bank or to the depth of anticipated flow, whichever is lower, with a minimum of 1½ ft. The center of the dam should be at least 6 inches lower than the height (outer edges). The bottom length should be three times the height (3 x h).

On bridge construction and replacement jobs, silt fencing (or an equivalent product) should be specified near the toe of the banks, parallel to the waterway and between the right-of-way limits on either side of the bridge. Roadside channels on either side of the bridge should have either check dams or bridge/erosion drain pipes (*ditch blocks*) to help slow channel velocity from any runoff during the time of construction, when the bridge embankment is vulnerable to erosion. Silt fencing and check dams used here can be shown on either the plan or bridge general plan sheets. (Refer to section 5.2.4 of the RDM and Chapter I of the Hydraulics Manual for design details pertaining to ditch blocks.)

Existing catch basins (both curb & open-top inlet types) that are to remain on a project should have some form of silt protection. Traditionally, this has been accomplished with either silt fence or hay/straw bales and thus, accounted for in a (204) pay item. Rock or stone barriers are also acceptable as long as they are properly installed. Because drainage work is performed early in the construction period, proposed catch basins should also have inlet protection.

Permanent erosion control at the outlets of cross drain structures should be noted on the preliminary plans (section 8.2.5(5.b) of the RDM).

(This paragraph reserved for future design guidelines pertaining to detention/sediment basins.)

FINAL DESIGN/PLAN CHECK

Standard Plan EC-01 should be included in the final plan set.

Silt fencing is used to minimize the amount of sediment leaving the construction site and/or entering water ways. It is also used to decrease the velocity of sheet flows. Silt fencing should be shown on the plans along areas of disturbance sloping away from the project site or towards adjacent, naturally existing water ways. It should not cross entrance and drainage ways. Disturbed areas typically extend fifteen (15) feet outside the limits of construction or to the limits of right-of-way, whichever is less. A look at the existing cross-sections will indicate slopes during clearing and grubbing operations. On urban projects where fore slopes are toward the roadway and inlet protection is specified, silt fence will likely not be necessary. The estimated quantity for silt fencing should take these and other situations into consideration. Silt fencing that coincides with the right-of-way should be indicated with an arrow and note at least once per plan sheet. At other locations, silt fencing should be indicated with the appropriate symbol at least once per plan sheet. Summary tables are now not required for silt fencing, since the plans can better indicate locations.

Show temporary slope (embankment) drains on the plans to carry storm water from the work area down unprotected long (greater than 100 ft.) and/or steep (greater than 2:1) slopes. Slope drains are typically only necessary on large, embankment moving projects. Earthen berms directing water into the pipe inlets should also be shown on the plans (see Std. Plan EC-01) unless the slope drains are included in a summary table(s).

Permanent erosion controls (i. e., seeding, mulching, rip-rap, erosion control systems, etc.), if not indicated on plan or profile sheets, should be tabulated in summary tables. This is a slight modification of Section 8.2.5(h) of the RDM. Locations (i. e., to and from stationing, and Lt., Rt., or Med. of roadway) and type (i. e., vegetative mulch, Type A covering, 30-lb rip-rap class, etc.) should be clearly indicated. (Refer to the Hydraulics office for design procedures pertaining to channel protection and rip-rap sizing/placement.) Erosion control coverings should be shown on either the profile sheets or listed in a summary table(s). They are used for either slope or channel protection, and should be labeled as such. Temporary check dams should still be placed in channels requiring covering until vegetation is established and the dams can be removed. The quantity for temporary seeding in these areas will be computed as specified in the appendix of the Road Design Manual under Miscellaneous Design Aids, *Rules Associated with Pay Items.* Rip-rap used at bridge abutments should be indicated on the bridge general plan sheets.

Pay items for temporary erosion controls should be included on the *Summary of Estimated Quantities* sheets. These include such items as temporary silt fencing and temporary slope drains (204-). Though not necessarily shown within the plans, at least two (2) items for temporary stone construction entrances should also be included on the *Summary of Estimated Quantities* sheets. Design aids for estimating temporary erosion control quantities are provided in the appendix of the Road Design Manual under Miscellaneous Design Aids, *Rules Associated with Pay Items.*

Pay items for permanent erosion controls should be included on the *Summary of Estimated Quantities* sheets. These include such items as fertilizing (718-01) and seeding (717-01), landscaping (719-), erosion control systems (720-), riprap used as outlet protection for cross drains and at bridge abutments (711), and others in the 700-no. category. Fertilizing and seeding limits are usually indicated on the typical section sheets (section 8.2.3(6) of the RDM). Permanent erosion controls can be used in place of temporary controls if placed early enough, and may share pay item numbers. Design aids for estimating permanent erosion control quantities are provided in the appendix of the Road Design Manual under Miscellaneous Design Aids, *Rules Associated with Pay Items.*

SEQUENCE OF CONSTRUCTION

Temporary erosion and sediment controls are usually installed during the first phase of construction, before the land is disturbed. In fact, storm water permit coverage starts from the commencement of construction activities until final project stabilization. Temporary structural controls must be removed whenever they are no longer necessary in serving their purpose, or when the protected area has been stabilized through the use of seeding and mulching, erosion control blankets, rip-rap, or other means. The installation and removal of controls and practices used to control erosion (BMPs) should be indicated on construction sequencing sheets. Below are guidelines for the sequencing of erosion controls and BMPs on LA DOTD state projects:

Silt fencing should be installed before clearing and grubbing operations begin, except when clearing involves installing the fence. Typically, this would be performed in the first stage of phase one of construction. It should be removed once the upslope area being protected has been stabilized. On bridge construction jobs over water ways, silt fencing should be installed before ground-breaking activities begin. On bridge replacement jobs over water ways, it should be installed prior to existing bridge removal and detour bridge construction (if applicable). In the case of both bridge construction and replacement jobs, it can be removed once the bridges and abutment protection are in place.

Slope drains and their temporary earth berms should be installed after clearing and grubbing and grading of the embankment slope has occurred. It should be removed only when the disturbed slope upon which it rests has been stabilized. This should be before roadway base work begins.

Check dams should be installed immediately after the channel is brought to grade, and should be removed only after the upslope channel for which they serve has been stabilized. Check dams in roadside channels near bridges should be placed before ground-breaking activities begin, or after ditch grading (if applicable). They should be removed after the installation of any bridge/erosion drain pipes (*ditch blocks*), or after the upslope channel for which they serve has been stabilized. Check dams should be tabulated in summary sheets indicating their locations by stationing. Where only a few dams are required, they can instead, be indicated on the sequence of construction sheets with a symbol, at a minimum scale of 1:1000 or 1" = 80'.

Protection for existing drainage inlets remaining onsite should be fully installed before clearing and grubbing operations begin in the area. Protection for proposed drainage inlets should be installed immediately after the new inlets are in place. In both cases, they should not be removed until the upslope area for which they serve has been stabilized. Inlet protections should typically be the last erosion controls removed from a site. They can be indicated on the sequence of construction sheets with a symbol, at a minimum scale of 1:1000 or 1" = 80'. Protection for many catch basins as part of subsurface drainage systems should instead, be listed in a summary table(s).

Temporary seeding, if necessary prior to permanent seeding, occurs after clearing, grubbing and grading operations. The limits are the same as that indicated on the typical section sheets for permanent seeding, and need not be shown elsewhere. A note on the sequence of construction sheets will suffice.

Erosion controls shown on the plan sheets reflect their initial placement.
During construction, some controls may need to change location based upon grade changes required to form the typical sections and based upon the location of detour roads. No additional payment will be made for the moving of erosion control devices at different sequences of construction. The former statement should be included in the notes of the construction sequence sheets.

Below is a reference table summarizing where erosion and sediment controls should be incorporated into the plan set.

E & S Control	Location in plan set	Include in summary tables?
Silt fence	plan, bridge general plan sheets	Not required
Slope drains	plan sheets	Yes, if not on plan sheets
Check dams	construction sequence sheets	Yes, if not on construction sequence sheets
Inlet protection	construction sequence sheets	Yes, if not on construction sequence sheets
Stone construction entrances	construction sequence sheets, if location known	No
Seeding, fertilizing, mulching & sodding (temporary & permanent)	typical section sheets	No
Erosion control systems	profile sheets	Yes, if not on profile sheets
Rip-rap (permanent)	plan, bridge general plan sheets	Yes, if used for channel lining

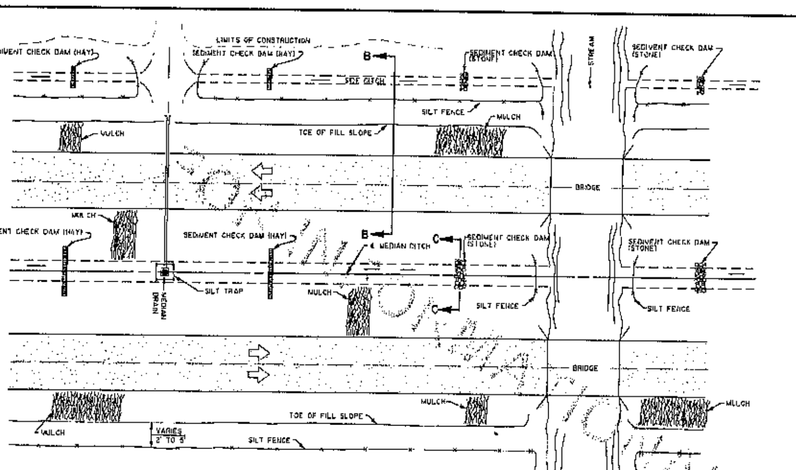
TEMPORARY EROSION AND SEDIMENT CONTROL SHEETS

The designer has the option of placing temporary erosion and sediment control measures on separate sheets. These should consist of layout sheets (similar to a construction sequence sheet) at a minimum scale of 1:000 or 1"= 80'. Layout sheets should indicate drainage patterns and, like the construction sequence sheets, a description of the phasing in of practices and controls. Temporary erosion control symbols should be included as part of a plan symbol legend on these sheets, and may include part or all of the construction legend to illustrate sequencing with roadway construction.

Where many controls are required such that may clutter these sheets, the controls should instead, be listed in tables on summary sheets, as mentioned previously. Permanent erosion controls should be shown on the appropriate sheets within the traditional plan set. They should be placed as soon as practical after clearing, grubbing, grading operations and if appropriate, after drainage installations.

Appendix N

Standard Plan EC-O1, Temporary Erosion Control Details

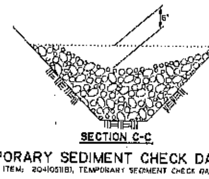


PLAN SHOWING TYPICAL TEMPORARY EROSION CONTROL

MULCHES

Mulches are the application of mats of material placed on the soil surface to prevent erosion by protecting the soil surface from raindrop impact and to reduce the velocity of overland flow. Mulches can be organic or synthetic. Mulches shall be in accordance with subsection 1018.19 of the LA DOTD Standard Specifications. A few guidelines for the use of Mulches are:

1. Use on cut and embankment slopes which have not been completed to plan grade or where the weather or soil conditions will not permit completing them within a reasonable time;
2. Use on cleared, grubbed, and scalped areas where soil erosion is likely to occur;
3. Use with temporary seeding.



SECTION C-C

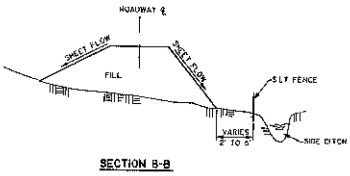
TEMPORARY SEDIMENT CHECK DAM (STONE)

PAY ITEM: 204(05)(B), TEMPORARY SEDIMENT CHECK DAM (STONE)

NOTES:

A stone check dam is a small temporary dam constructed across a swale or drainage ditch. The purpose of this measure is to reduce the velocity of concentrated stormwater flows, thereby reducing erosion of the swale or ditch. The stone check dam will trap small amounts of sediments generated in the ditch itself, however it should not be used as a sediment trapping device. A few basic design guidelines for the use of Stone Check Dams are:

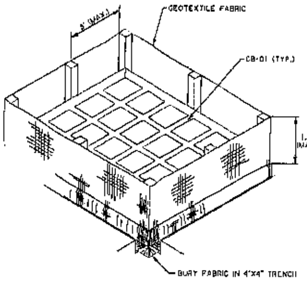
1. Use in small open channels which drain 10 acres or less;
2. Do not use in a live stream;
3. Use in a temporary ditch or swale which, because of their short length of service, cannot receive a non-erodable lining;
4. Use in permanent ditches or swales which will not receive a permanent lining for an extended period of time;
5. Use in temporary or permanent ditches or swales which need protection during the establishment of grass linings.
6. For stone specifications see subsection 711.02(a)(Class 2LB.) of the LA DOTD Standard Specifications.



SECTION B-B

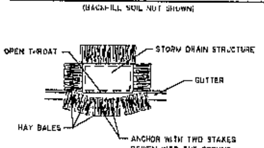
TEMPORARY SILT FENCE APPLICATION

(FOR CONSTRUCTION DETAILS AND SPECIFICATIONS SEE SHEET 2 OF 2.)



ISOMETRIC VIEW SHOWING GEOTEXTILE FABRIC

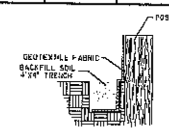
(BACKFILL SOIL NOT SHOWN)



PLAN SHOWING HAY BALES

PAY ITEM: 204(02), TEMPORARY BALED HAY OR STRAW

F.A.P.	STATE PROJECT	PARISH	SHEET NO.



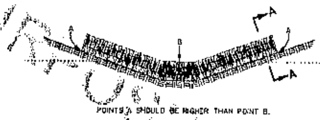
SECTION THRU TRENCH SHOWING GEOTEXTILE FABRIC

NOTES:

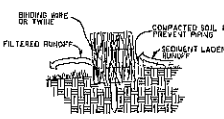
The temporary drop inlet silt trap is to be used for small drainage areas (less than 1 acre) where the storm drain is functional before the area is stabilized. The trap can be either geotextile fabric or hay bales.

1. The geotextile fabric shall conform to Section 1019 (Type G) of the LA DOTD Standard Specifications.
2. Wooden stakes supporting the fabric shall be 2" x 2" or 2" x 4" with a minimum length of 3 feet. The stakes shall be spaced around the inlet at a maximum spacing of 3 feet.
3. The height of the fabric above the inlet shall be limited to 1.5' and the bottom of the fabric shall be buried in a trench approximately 4" wide by 4" deep. The fabric shall be stapled to the post with ½" staples.
4. The trap should be inspected regularly and after each storm. The sediment should be removed and make sure each stake is firmly in the ground.

TEMPORARY INLET SILT TRAP



ELEVATION



SECTION A-A

TEMPORARY SEDIMENT CHECK DAM (HAY)

PAY ITEM: 204(05)(A), TEMPORARY SEDIMENT CHECK DAM (HAY)

NOTES:

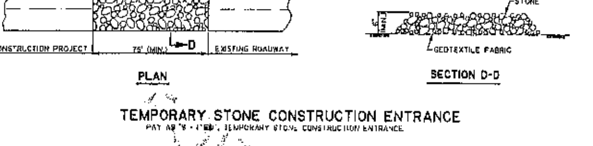
A hay bale barrier is a temporary sediment barrier consisting of a row of entrenched and anchored bales of straw or hay. The hay bale barrier is also used as a check dam to reduce the velocity in small ditches or swales. The hay bales shall be in accordance with LA DOTD Standard Specifications, Section 204. A few basic design guidelines for the use of a Hay Bale Barrier are:

1. Use where erosion would occur in the form of sheet and rill erosion;
2. Use in minor swales or ditches where the maximum drainage area is 2 acres;
3. Only use where the effectiveness is required for less than 3 months;
4. Do not use in live streams or in swales or ditches where there is a possibility of a washout.

DATE	DESCRIPTION	BY
	REVISIONS	

STANDARD PLAN NO.	EC-01	SHEET 1 of 2
TEMPORARY EROSION CONTROL DETAILS		
DATED: January 14, 1994		
STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT		
DESIGNED: JCM	DETAILED: KAJ	DIR: cadd/dgn/stdplans
CHECKED:	CHECKED: JCM	FILENAME: ec01.dgn
Approved By Chief Engineer (Original Signed By Chief Engineer) Date 11-14-94		

F.A.P.	STATE PROJECT	PARISH	SHEET NO.



TEMPORARY STONE CONSTRUCTION ENTRANCE

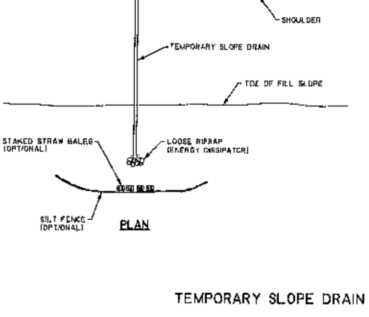
PAY AS "B-(TEM), TEMPORARY STONE CONSTRUCTION ENTRANCE

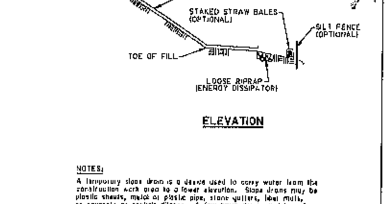
NOTES:

TEMPORARY STONE CONSTRUCTION ENTRANCE AND/OR WASH RACK

A stone stabilized pad located at points of vehicular ingress and egress on the construction site to reduce the amount of mud transported onto public roads. If the action of the vehicle traveling over the gravel pad is not sufficient to remove the majority of the mud, then the tires must be washed before the vehicle enters a public road. A few basic design guidelines for the use of a Stone Construction Entrance and/or Wash Racks are:

1. The stone layer must be at least 6 inches thick;
2. The stone shall conform to Section TJ 1021(Class 2LB) of the LA DOTD Standard Specifications;
3. The length of the pad must be at least 75 feet and it must extend the full width of the vehicular ingress and egress;
4. A geotextile fabric underliner is required. The geotextile fabric shall be in accordance with Section 1019 (Type D) of the LA DOTD Standard Specifications;
5. If a wash rack is necessary, provisions must be made to intercept the wash water and trap the sediment before it is carried off site.





ELEVATION

TEMPORARY SLOPE DRAIN

NOTES:

A temporary slope drain is a device used to carry water from the construction work area to a lower elevation. Slope drains may be plastic sheets, made of plastic pipe, stone gutters, fiber mats, or concrete or asphalt ditches. A few basic design guidelines for the use of a Temporary Slope Drain are:

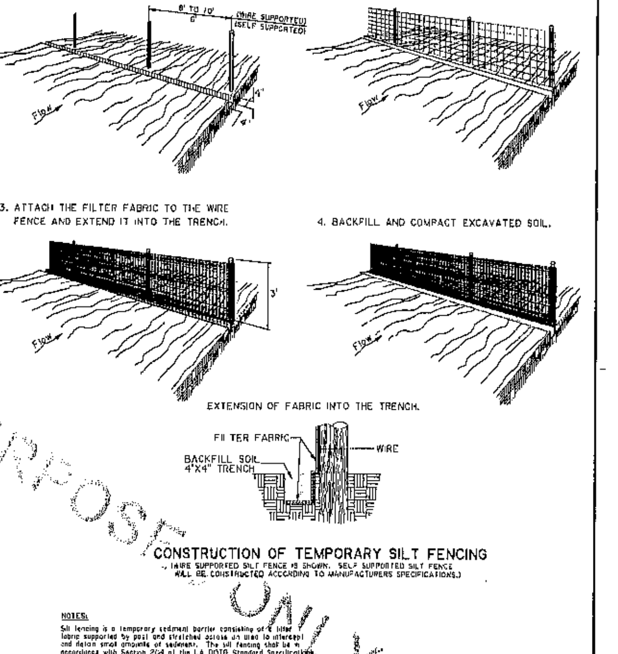
1. The spacing of the slope drains varies with the road grade.

For Grades:		
	0.0% - 2.0%	use 500' spacing
	2. % - 5.0%	use 200' "
	Greater than 5.0%	use 100' "

2. Slope drain materials:

Smooth pipe	- 8" minimum
Corrugated pipe	- 12" minimum
Plastic sheeting	- 4' wide minimum
	- 3 mils thick min.

3. Plastic sheeting can be staked down or weighted with rocks or rope. The area under the sheeting should be shaped to provide an adequate channel.
4. The outlet end should be protected or have some means of dissipating energy. The flow should be directed through a sediment trap such as a silt fence or hay bales.
5. To insure proper operation, temporary slope drains should be inspected regularly and after each storm, for clogging or displacement. Erosion of the outlet should be checked and the silt traps cleaned if necessary.



CONSTRUCTION OF TEMPORARY SILT FENCING

(WIRE SUPPORTED SILT FENCE IS SHOWN. SELF SUPPORTED SILT FENCE WILL BE CONSTRUCTED ACCORDING TO MANUFACTURERS SPECIFICATIONS.)

NOTES:

Silt fencing is a temporary sediment barrier consisting of a filter fabric supported by post and stretched across an area to intercept and detain small amounts of sediment. The silt fencing shall be in accordance with Section 204 of the LA DOTD Standard Specifications. A few basic guidelines for the use of Silt Fencing are:

1. Use where erosion would occur in the form of sheet and rill erosion;
2. Use where the maximum drainage area behind the silt fence is 1/4 acre per 100 feet of silt fence length;
3. Use where the maximum slope length behind the barrier is 100 feet;
4. Use where the maximum gradient behind the barrier is 2:1;
5. Do not use silt fences in live streams or in ditches or swales where flows exceed one cubic foot per second.

DATE	DESCRIPTION	BY
	REVISIONS	

STANDARD PLAN NO. EC-01 — SHEET 2 of 2

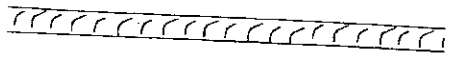
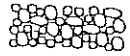
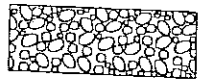
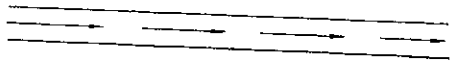
TEMPORARY EROSION CONTROL DETAILS

DATE January 14, 1994

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

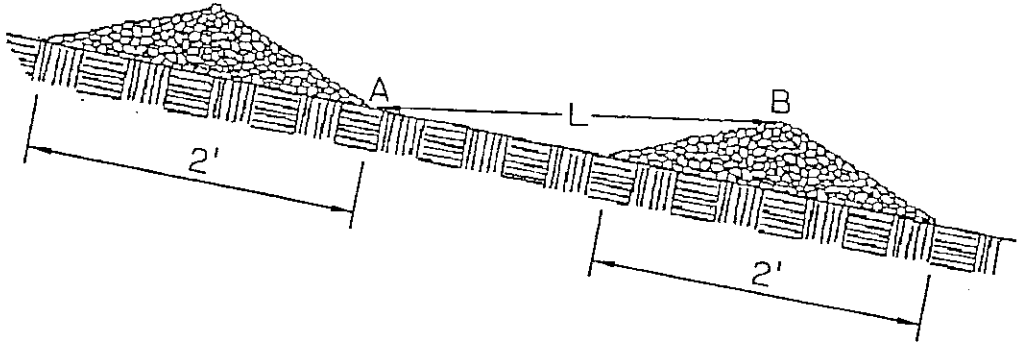
DESIGNED JCM	DETAILED KAJ	DIR. cadd/dgn/stdplans
CHECKED	CHECKED JCM	FILENAME ec01.dgn
Approved By Chief Engineer (Original Signed By Chief Engineer) Date (1-14-94)		

TEMPORARY EROSION & SEDIMENT CONTROL SYMBOLOGY

SILT FENCE	
TEMPORARY BERM	
SEDIMENT CHECK DAM (STONE)	
STABILIZED CONSTRUCTION ENTRANCE	
HAY BALES OR SEDIMENT CHECK DAM (HAY)	
INLET PROTECTION	
TEMPORARY SLOPE DRAIN	

SPACING BETWEEN CHECK DAMS

L = THE DISTANCE SUCH THAT POINTS
A AND B ARE OF EQUAL ELEVATION



Appendix O

Plan in Hand Memorandum Review Form

PLAN-IN-HAND
MEMORANDUM REVIEW

DISTRICT NO.:_____ P/H INSPECTION MADE ON:_____

S.P. NO.:_____ ROUTE NO.:_____

F.A.P. NO.:_____ PARISH:_____

NAME:_____

PLAN-IN-HAND PARTY

NAME	TITLE	AGENCY	SECTION

PLAN-IN-HAND
INSPECTION REPORT

	YES	NO	COMMENTS
TYPICAL SECTION SHEETS:			
1. Is the District in agreement with the proposed pavement types?			
SUMMARY SHEET:			
1. Will an item for cleaning of existing ditches be required?			
2. What types of temporary erosion control items will be required?			
3. How many construction entrances will be required?			
4. Is the method of payment for removal of pavement satisfactory?			
5. Will temporary maintenance aggregate be required? If so, how much?			
6. Will granular material be required for backfill?			
7. Is the method of payment for earthwork satisfactory?			
8. Are special erosion control items necessary?			
9. Will an item for muck excavation be required?			

	YES	NO	COMMENTS
PLAN PROFILE SHEETS:			
1. Is adequate right-of-way provided for relocation of utilities?			
2. Will any right-of-entry agreements be required? Is this satisfactory? Who will secure it?			
3. Will construction be impacted by existing horizontal or vertical clearance?			
4. Is adequate outfall information shown?			
5. Has sufficient drainage excavation and/or cleaning of outfall laterals necessary for adequate drainage been shown?			
6. Will cleaning be required for existing drainage structures?			
7. Will special ditch protection items be required?			
8. Will any underdrains be required?			
9. If retaining walls are necessary, will they be cast in place or mechanically stabilized?			
10. Are there any oil or gas wells on the project that do not show up on the plans?			

		YES	NO	COMMENTS
11.	Are there any noticeable encroachments on the right-of-way? Are existing improvements within 50' of required right-of-way shown on the plans?			
12.	Any potential hazardous waste site/ust?			
13.	Will construction or drainage servitude be required?			
GEOMETRIC DETAILS:				
1.	Are there any areas where improvements can be made to the alignment?			
SEQUENCE OF CONSTRUCTION:				
1.	Is through traffic to be maintained?			
2.	For local traffic only, will school buses, mail carriers, or other local traffic require special maintenance of traffic provisions?			
3.	If temporary sheeting is required to maintain traffic, is the method of payment satisfactory?			
4.	Does the detour limits exceed the limits of roadway improvements?			
5.	Can detours be built due to grade difference between new and existing roadways?			

		YES	NO	COMMENTS
6.	Check for conflicts between new roadway and existing roadway being used to maintain traffic.			
7.	Method of payment for detour (if required).			
8.	Can drainage be maintained during construction?			

GENERAL:

1.	If sub-surface drainage is being used, is there any evidence of effluent sewerage entering existing roadside ditches?			
2.	Are all utilities shown? Pipelines shown in profiles, if applicable?			
3.	Have 60% comments been received from the District?			
4.	Are there any major utility conflicts?			
5.	Are there any major right-of-way conflicts?			
6.	Will sawed joints be required for limits of pavement removals (including walks, drives, cross-overs etc.)? If yes, is the method of payment satisfactory?			
7.	Will any materials be salvaged? If so, where should this material be hauled?			

		YES	NO	COMENTS
8.	Is there any extra-ordinary maintenance problems or procedures anticipated as a result of the proposed project?			
9.	Is a clearing and grubbing project recommended?			
10.	Will surcharging the embankment be required?			
11.	Are there any proposed permit requests that will affect this project? (404, NW,)			
12.	Are the drainage and construction servitude large enough for equipment mobilization?			
13.	If this project creates any additional mileage for our system has Planning been notified for potential exchange with cooperating agency?			
14.	Do any recommended changes exceed the original scope of the project?			
15.	Does the limit/scope of the project match those in the environmental document?			
16.	Are there any mitigation items that need to be addressed in plan development?			

17. List below any comments or recommendations concerning the roadway.

	YES	NO	COMMENTS
BRIDGE PLANS			
1. Is stationing of beginning and end of existing bridge shown?			
2. Is description of existing bridge shown?			
3. Is high water elevation shown?			
4. Is drainage area shown?			
5. Is required area of opening shown?			
6. Is stream navigable either by law or local usage?			
7. Is a U.S.G.S. report recommended?			
8. Have recommended channel changes been shown?			
9. Is the stream meander shown within right of way and/or beyond where necessary?			
10. Is sufficient right of way shown at each structure?			
11. Is detour required? If yes, (A) has the location, type, length, width, area of opening, surfacing, and other details been shown?			

	YES	NO	COMMENTS
12. Is stream subject to drift?			
13. Is stream subject to scour?			
14. Will revetments be required? If yes, has the type, location and other details been shown?			
15. Is drainage excavation required?			
16. Are pile design loads and type shown?			
17. Have the borings been reviewed and approved?			
18. Have location of test pile(s) been marked on the P/H prints?			
19. Is the use of drilled shafts indicated?			
20. Are there any utility lines that will interfere with pile driving operations and have they been shown on the P/H prints?			
21. Are all utilities that may affect the construction accurately located and details on the P/H prints?			
22. Is there a need for vibration monitoring and site surveys?			

		YES	NO	COMMENTS
23.	Are the location of expansion and fixed ends shown and are they satisfactory?			
24.	Are controlling vertical and horizontal dimensions shown?			
25.	Is the superstructure cross section satisfactory?			

26. The length of permanent piles is to be determined by:

Borings: _____

Test Piles: _____

Record of Existing Structure: _____

27. List below any comments or recommendations concerning this structure.

28. List below any special considerations or agreements recommended for negotiations by the Right-of-Way Section:

List below any additional or special information.

List general remarks, comments and/or recommendations below:

SHEET NO.	COMMENTS

The following special problems need to be resolved.

Prepared By: _____
Title: _____
Section: _____

VALUE ENGINEERING

Are there any items that are candidates for value engineering? ___ Yes* ___ No ___ N/A

*If yes, please comment below

REMARKS:

Value Engineering Team Members:

Project Coordinator -
FHWA Area Engineer -

Appendix P

SPC Questionnaire

Spill Prevention and Control Plan (SPC) Questionnaire

Facility Information:

Facility Name:_____

Address:_____

Facility Operator:_____

Facility Description (e.g. maintenance unit, storage yard, etc.):_____

(Please mark answers with an (X).)

Did operations at your facility begin before August 16, 2002: YES ☐ NO ☐

Information on Aboveground Storage Containers:

1. Does your facility have any SINGLE aboveground storage containers with a capacity of 660 gallons of oil or other chemicals: YES ☐ NO ☐

2. Does your facility have multiple containers with a TOTAL aboveground storage capacity greater than 1,320 gallons of oil or other chemicals: YES ☐ NO ☐

3. Do the aboveground containers have secondary containment: YES ☐ NO ☐

4. Oils stored in these aboveground containers:
   (Please mark all that apply.)
   a. Petroleum ☐
   b. Fuel Oil ☐
   c. Sludge ☐
   d. Vegetable Oils ☐
   e. Other Oils & Greases ☐
   f. Oil Refuse ☐
   g. Oil with Wastes Other than Dredged Spoil ☐
   h. Fats, Oil or Greases of Animal, Fish, or Marine Mammal Origin (including Synthetic Oils and Mineral Oils) ☐

5. Please list any chemicals, other than oils, stored in aboveground storage tanks at your facility:

_____

6. Considering geographic location, in the event of a release, could your facility discharge oil or other chemicals into any:
(Please mark all that apply.)

a. Streams ☐
b. Ponds and Ditches ☐
c. Storm or Sanitary Sewers ☐
d. Wetlands ☐
e. Mudflats ☐
f. Sandflats ☐
g. Other Navigable Waters ☐

7. Please list the nearest potential receiving waters in case of an oil or other chemical spill:

a._____

b._____

c._____

8. Does your facility have any of the following spill prevention measures already in place:
(Please mark all that apply.)

a. Dikes, Berms, or Retaining Walls Sufficiently Impervious to Contain Oil Spills ☐
b. Curbing, Drip Pans ☐
c. Culverts, Gutters or Other Drainage Systems ☐
d. Weirs, Booms or Other Barriers ☐
e. Spill Diversion Ponds ☐
f. Retention Ponds ☐
g. Sorbent Substances ☐
h. Sumps and Collection Systems ☐
i. Additional Tanks to Automatically Receive Overflow ☐
j. Liquid Level Sensing Devices ☐
k. Other *(Please list)*:_____

Please complete and email form to Nicholas.Larks@la.gov by Monday, November 1, 2010.

Appendix Q

Project Delivery Manual Excerpts

Compliance with Post-Construction Environmental Commitments

In some instances, the Department will agree to post-construction environmental actions or monitoring for a limited period as a condition of a regulatory agency permit or commitment to a community. Examples of such agreements include post-construction erosion control, maintaining vegetation installed for mitigation purposes, monitoring water quality in an adjacent stream, or monitoring traffic following construction to determine if a particular traffic control device, such as a signal, is warranted.

In many instances, the Area Engineer will be the official charged with ensuring compliance with post-construction environmental commitments. However, in some instances, it may be the District Traffic Engineer or the Environmental Section. The Project Engineer is responsible for notifying the appropriate official(s) when construction has been completed and explaining the nature of post-construction environmental commitments, should they exist. The ADA of Operations will be kept informed of any significant related issues and will become involved in the process as needed to ensure conformity with all applicable regulations and commitments.

At the conclusion of the commitment, the official charged with compliance should notify the Environmental Section that the commitment has been fulfilled. The Environmental Section will in turn notify the appropriate regulatory agency or community officials.

Materials Durability and Performance Monitoring

The Department maintains an approved products list from which a contractor may select materials for use on state highway construction projects. Following construction, field monitoring of the durability and performance of these materials would obviously benefit the Department. The Materials and Testing Section should be advised of any materials that do not appear to perform well. The Material and Testing Section may in turn refer the matter to the New Products Evaluation Committee for consideration of removal of the product from the approved products list. Reference is made to EDSM Number V.4.1.1: "New Products Evaluation Committee."

Identification of Design Features that Complicate Maintenance Activities

During the design of a project, insufficient consideration of post-construction facility maintenance can result in difficulties and inefficiencies in maintenance operations. Maintenance personnel must identify and document any design features that complicate maintenance activities, and share this information with the appropriate design section(s). Through such a process, standard plans and details can be modified to facilitate maintenance activities and improve the Department's overall performance.

Responsibility Matrix

STAGE 6 – SYSTEM OPERATIONS AND PERFORMANCE RESPONSIBILITY MATRIX	
FUNCTION	**RESPONSIBLE**
Disposal of excess right-of-way	District Maintenance Section, District Design Section, Real Estate Section
Documentation of utilities permitted on the right-of-way	District Utilities Specialist with the District Permits Unit
Compliance with post-construction environmental commitments	District Maintenance Section, District Traffic Engineering Section, Environmental Section (depends on nature of commitment), Area Engineer
Materials durability and performance monitoring	District Maintenance Section, District Traffic Engineering Section, Area Engineer
Identification of design features that complicate maintenance activities	District Maintenance Section, Area Engineer
Project Closeout Meeting	Design Engineer

Appendix R

Master SWPPP Template

LOUISIANA DEPARTMENT OF
TRANSPORTATION & DEVELOPMENT

STORM

WATER

POLLUTION

PREVENTION

PLAN

Storm Water Pollution Prevention Plan (SWPPP)

Permit Number: LAR 600000

Prepared For:

_____

Project Name & Location:

_____

_____

_____

Prepared by:

_____

Date:

_____

CERTIFICATIONS

To Be Completed by Construction Site Operator (Plans and Specifications Operational Control)

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

Name and Title _____ Telephone Number _____

Signature _____ Date _____

To Be Completed by Construction Site Operator (Day-to-Day Operational Control)

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

Name and Title _____ Telephone Number _____

Signature _____ Date _____

SWPPP Revision Documentation Form

This storm water pollution prevention plan (SWPPP) should be revised and updated to address changes in site conditions, new or revised government regulations, and additional on-site storm water pollution controls. The signature of this representative attests that the SWPPP revision information is true and accurate. Previous authors and facility representatives are not responsible for the revisions.

Number	Date	Company Representative's Signature

CONTENTS

11.0 APPROVED LOCAL PLAN

12.0 MAINTENANCE

13.0 INSPECTIONS OF CONTROLS

14.0 CONTRACTORS AND SUBCONTRACTORS RESPONSIBILITIES

15.0 UTILITY COMPANIES

APPENDICES

APPENDIX A, General Location Map and Site Map
APPENDIX B, LPDES Storm Water Construction General Permit
APPENDIX C, Site Information

1. General Description Sheet
2. Schedule Sheet for Soil Disturbing Activities
3. Soil Data Sheet
4. Erosion and Sediment Control Site Map
5. Erosion and Sediment Control Plan
6. Stabilization Practice Schedule
7. Structural Control Sheet
8. Construction Site Inspection Report

11.0 APPROVED LOCAL PLAN

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