Permittee: Louisiana Department of Transportation and Development

Permit Number: LAR043001

Agency Interest No: 108424

Reporting Period: January 1, 2017 - December 31, 2017



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, 2018

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.

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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 LARO40000.

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.

- o Public Education and Outreach on Storm Water Impacts
- o Public Involvement/Participation
- o Illicit Discharge Detection and Elimination
- o 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 five major topics to address each of the five annual report requirements as stated in the permit. The LADOTD's annual report details the pollution prevention activities undertaken by the permittee during the 2017 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
- o Mandeville-Covington urbanized area
- o Monroe urbanized area
- New Orleans urbanized area
- Shreveport urbanized area
- o Slidell urbanized area
- LDEQ-designated regulated area of Abbeville
- LDEQ-designated regulated area of Bastrop
- LDEQ-designated regulated area of Hammond
- o 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:

- 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;
- 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 2017 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 2017 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 2017, 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	20
Lake Charles, LA	I-10 Eastbound Welcome Center	20
Houma, LA	LADOTD Customer Service for Toll	20
Choudrant, LA	Tremont West Bound Rest Area	20
Choudrant, LA	Tremont East Bound Rest Area	20

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:

- o An MS4 Defined
- Examples of BMPs
- o Previously submitted Annual Reports
- o Examples of Illicit Discharges
- o A Mechanism to Report an Illicit Discharge
- Urbanized Area Maps
- o External Links to LADOTD Adopt-a-Road program, LADEQ 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 6,549 visitors. Of the 6,549 total views, 505 occurred in 2017. This represents an increase in visits in comparison to the previous reporting year. The website can be found at the following address: http://www.sp.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 2017 calendar year. The first having a contract term June 20, 2016 to June 29, 2017 and the second and current contract term is from June 30, 2017 to June 29, 2018. The contract stipulates that the PSA will be aired a minimum of 40 times during each contract term. The PSA

had 97 broadcasts on the LPB station between 01/01/2017 to 12/31/2017. 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 339-word article titled, Environmental Effects of the August 2016 Flood. The article appeared in the August 2017 *Visions* publication, Volume 41, 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. Print, TV, as well as electronic media is 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 crayons, stickers, and a book marker, Clean Water, Everybody's business. Packets LADOTD rest areas and tourist centers statewide. Refer to Appendix F for an example	were distributed at

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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 Adopta-Road Program. A link to the Adopta-Road website has also been established on the permittee's storm water website. The Adopta-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 2017. This accounts for a total of 138.87 miles of adopted highway and 82 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/AnnualRep_orts.aspx. In 2017, 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://www.dotd.la.gov/downloads/publicrecords.pdf. The permittee received no public records requests in 2017. 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 2017.

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 2018, 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. Unfortunately, we are behind schedule inspecting these outfalls. However, our plan is to strive and continue to work toward our goal. 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 ECU completed an annual refresher on illicit discharges. The training was also presented in the annual Waste Water Recertification on August 23rd to 33 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.

In addition, permittee representatives attended the Louisiana Solid Waste Association's (LSWA) 37th Annual Environmental Conference held in Lafayette, LA on March 15-17th, 2017. Conference attendees

included persons from federal, state, local, an informational topic on Keep Louisiana E can be found in Appendix S.		

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 respectively. 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. 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 2017, a total of 24 SWPPPs were reviewed statewide. A portion of the master SWPPP template is provided in Appendix T.

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 2017, the permittee identified 43 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:

No educational opportunities were provided in 2017.

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 2017 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 regulations, 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 redevelopment. 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://www.dotd.louisiana.gov/highways/project devel/design/road design/Hydraulics%20Manual/01 %20La%20DOTD%20Hydraulics%20Manual%20(full%20text).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

http://www.dotd.louisiana.gov/highways/project_devel/design/road_design/Erosion%20Control%20Guidelines/00%20La%20DOTD%20Erosion%20Control%20Guidelines%20(Full%20Text).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://www.dotd.la.gov/highways/standardplans/DirListing.aspx?txtPath=/highways/standardplans/Standard Plans/Erosion Control and Bedding Material.

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, as well on the permittee's website at the address provided below: http://www.dotd.la.gov/highways/project_devel/design/road_design/Standard%20Forms/Plan%20In-Hand%20Review.pdf.

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 Standard Operating Procedure of the Project Delivery Manual are provided in Appendix Q for review. A copy of the Project Delivery Manual in its following address: permittee's website at the is available on the http://www.dotd.la.gov/doclist.asp?ID=6.

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 and Chapter 7 of the Bridge Design Manual, both detail the environmental considerations to take in account while developing the

construction plan with regard to post construction operation. Both manuals are available at the permittee's website at the following addresses:

Road Design Manual

http://www.dotd.louisiana.gov/highways/project_devel/design/road_design/documents.aspx

Chapter 7 of Bridge Design Manual

http://www.dotd.louisiana.gov/highways/project_devel/design/bridge_design/Bridge%20Design%20English%20Manual/10%20Chapter%207%20-%20Environmental%20Considerations%20and%20Permits.pdf

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:

One watershed meeting was attended in 2017 at the Louisiana Environmental Conference. The agenda for the conference can be found in Appendix S.

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 2017, 16,792.33 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
- o 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 21,525.06 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 pesticides 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 78 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 9,019 locations and mechanically sprayed 28,933.08 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:

- o Clean and Maintain Drainage Structures, 450-01
- o 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 2017, maintenance of drainage structures occurred at 29,424.5 locations, 395 drainage structures were repaired, 84 new drainage culverts were installed. 74,502.74 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, screen shots of the databases 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. As of May 2013, 50 SPC plans were developed for facilities statewide. Twenty-six (26) SPC plans were revised in 2017. 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 numerous trainings held in 2017, in the permittee's regulated areas.

Date	Course Number	Course Title	Regulated Area
November 16, 2017		DOTD Drain Cleaning Activities	District 02
December 11-12,2017		Certified Stormwater Inspector	District 62, 05, 07

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 2017, 350 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.

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

A total of 7,780.5 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 2017, the permittee applied

253.8 cubic yards of lightweight aggregate and 2,029,450 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 4,790.5 hours to the loading, hauling, unloading, and inventory of bulk materials during the 2017 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
- o Remove Drift, 465-17

420,367 linear feet of drainage structures were cleaned by removing waste from deck drains and lines. Trash was removed from 280 locations near bridge drainage structures and culverts in 2017. 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:

The accomplishments from the following maintenance activities are used to obtain the measurable goals for the debris management BMP.

- Vegetative Debris Removal and Disposal, 440-08
- Clearing Roadways Travel Lane, 440-19

o Disposal of Roadway Debris, 630-09

5,757.82 cubic yards of accident or storm related waste was collected on Louisiana roadways and roadsides in 2017. Routine debris was removed and properly disposed of from 127.35 miles of highway and shoulder in 2017. 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. 168,603.66 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 2018

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).

In 2018, the LADOTD Environmental Compliance Unit (ECU) looks forward to its continued work efforts with internal stakeholders and the LDEQ to further address initiatives identified over the past two years. This will include on-going discussions and updates to the outfall maps for the areas of the 303 (d) Impaired Water Bodies, an increase in the percentage of outfall screening, working closer with the department's Training Section (LTRC) to identify and make available related stormwater training for a larger segment of department personnel, and etc. The ECU is also excited about its recent purchase of "top quality" GPS units to aid in the on-going outfall assessments across the state. While the entire state of Louisiana continues to rebound from the far-reaching impacts of the historic 2016 floods, we are optimistic these GPS units will greatly increase the information base and efficiency of this work effort.

Over the last two years, the ECU has focused on including stormwater related topics as part of its Annual Water and Wastewater Re-certification training. This has proven to be an effective vehicle in educating a number of statewide internal stakeholders. We will again include such topics in this year's class. 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 initiative mentioned above involving LTRC.

With the authorization and implementation of the December, 2016 new Statewide Construction and Maintenance Stormwater Permit, the ECU and the Construction Section spent a significant amount of time introducing its stakeholders to the new permit. In 2018, the ECU will be working even closer with DOTD Contractors and internal Construction and Maintenance personnel to ensure compliance with the finer details of the new 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

ВМР	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	7
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	itter Collection Pick Up of Debris/Litter 630-10 Cubic Yards		82	
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	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	80
	Number of Licensed Applicators		Each	2
Mot Salaz	Number of Training Hours		Hours	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	7
	Drainage Structure Repair	450-02	Each	4
	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	7,800
	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	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	0
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	134.5
Debris Management Vegetative Debris Removal & Disposal 440-08	Cubic Yards	22		
	Clearing Roadways Travel Lanes	440-19	Miles	
	Disposal of Debris/Litter	630-09	Cubic Yards	0

Table II

UA: Alexandria

ВМР	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	32
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	413.301
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	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	1,098.4
	Number of Licensed Applicators		Each	5
	Number of Training Hours		Hours/Each	12
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	1,414
	Drainage Structure Repair	450-02	Each	10
	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	99,771
	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	3,436
	Remove Drift	465-17	Each	37
Street Sweeping	Sweeper Cleaning	540-03	Miles	192.15
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	118.5
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	106
Bulk Materials Management	Material Hauling	630-03	Hours	84
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	0
	Clearing Roadways Travel Lanes	440-19	Miles	6.68
	Disposal of Debris/Litter	630-09	Cubic Yards	47.101

Table III

LDEQ- designated regulated area: Bastrop

ВМР	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	3,031
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	0
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	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	228
	Herbicide Application-Machine Method	440-13	Acres	3
	Number of Licensed Applicators		Each	0
	Number of Training Hours		Hours	N/A
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	3
	Drainage Structure Repair	450-02	Each	1
	Install Drainage Culverts	450-03	Each	1
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	195
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	435
	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
August to the first	Remove Drift	465-17	Each	6
Street Sweeping	Sweeper Cleaning	540-03	Miles	8.08
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	0
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	71.5
Bulk Materials Management	Material Hauling	630-03	Hours	0
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	73
	Clearing Roadways Travel Lanes	440-19	Miles	0.01
	Disposal of Debris/Litter	630-09	Cubic Yards	0

Table IV

UA: Baton Rouge

ВМР	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	54
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	156,321.66
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	2,376.73
FOR SALES AND SALES	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	53
	Pick Up of Inmate Litter	440-05	Cubic Yards	377
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	330
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	507
	Herbicide Application-Machine Method	440-13	Acres	1,986
	Number of Licensed Applicators		Each	6
	Number of Training Hours		Hours	16
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	5,350
	Drainage Structure Repair	450-02	Each	22
	Install Drainage Culverts	450-03	Each	16
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	55.01
4.5	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	79,004.74
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Visit Market Sale	Clean Structural Members	465-00	Each	0
Bridge & Structure Maintainence	Clean Deck & Drain	465-01	Linear Feet	2,200
	Remove Drift	465-17	Each	15
	Sweeper Cleaning	540-03	Miles	594.51
Street Sweeping	Snow & Ice Control	540-07	Hours	71
De-Icing/Anti-Icing Materials Management	Snow & Ice Inspection/Reconnaissance	540-09	Hours	24.5
Bulk Materials Management	Material Hauling	630-03	Hours	1,147.5
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	1,496.01
	Clearing Roadways Travel Lanes	440-19	Miles	4.32
	Disposal of Debris/Litter	630-09	Cubic Yards	27.5

LDEQ- designated regulated area: Hammond

ВМР	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	8
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	14
	Pick Up of Inmate Litter	440-05	Cubic Yards	137
	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	2,676.45
	Number of Licensed Applicators		Each	11
	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	518
	Drainage Structure Repair	450-02	Each	0
	Install Drainage Culverts	450-03	Each	5
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	300
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	39,580
	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	67
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	66.75
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	57
Bulk Materials Management	Material Hauling	630-03	Hours	67.50
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	1,020
	Clearing Roadways Travel Lanes	440-19	Miles	3
	Disposal of Debris/Litter	630-09	Cubic Yards	213.25

Table V

Table VI

UA: Houma

ВМР	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	33
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	278
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	48
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	0
	Herbicide Application-Machine Method	440-13	Acres	7,385
	Number of Licensed Applicators		Each	3
	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	2,656
	Drainage Structure Repair	450-02	Each	16
	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	31,593
	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	112
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	35
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	3
Bulk Materials Management	Material Hauling	630-03	Hours	61
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	371
	Clearing Roadways Travel Lanes	440-19	Miles	7.01
	Disposal of Debris/Litter	630-09	Cubic Yards	182

Table VII

UA: Lafayette

ВМР	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	32
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	413.301
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	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	1,098.4
	Number of Licensed Applicators		Each	6
	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	1,414
	Drainage Structure Repair	450-02	Each	10
	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	99,771
	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	3,436
	Remove Drift	465-17	Each	37
Street Sweeping	Sweeper Cleaning	540-03	Miles	192.15
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	118.5
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	106
Bulk Materials Management	Material Hauling	630-03	Hours	84
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	0
	Clearing Roadways Travel Lanes	440-19	Miles	6.68
	Disposal of Debris/Litter	630-09	Cubic Yards	47.101

Table VIII

UA: Lake Charles

ВМР	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	51.5
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	1,419.35
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Pick Up of Inmate Litter	440-05	Cubic Yards	162
	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	2,444
	Number of Licensed Applicators		Each	4
	Number of Training Hours		Hours/Each	12
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	1,010
	Drainage Structure Repair	450-02	Each	13
	Install Drainage Culverts	450-03	Each	3
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	1,092
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	27,107
	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	17,355
	Remove Drift	465-17	Each	4
Street Sweeping	Sweeper Cleaning	540-03	Miles	149.28
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	53.75
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	22.5
Bulk Materials Management	Material Hauling	630-03	Hours	56
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	2
	Clearing Roadways Travel Lanes	440-19	Miles	0
adion at the	Disposal of Debris/Litter	630-09	Cubic Yards	0

Table IX

UA: Mandeville-Covington

ВМР	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	3
	Servicing of Litter Barrels	440-03	Cubic Yards	0
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	6
	Pick Up of Inmate Litter	440-05	Cubic Yards	272
	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	2,271.50
	Number of Licensed Applicators		Each	11
THE STATE OF THE STATE OF	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	356
	Drainage Structure Repair	450-02	Each	11
	Install Drainage Culverts	450-03	Each	8
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	0
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	66,305
	Install/Replace Inlets & Catch Basins	450-06	Each	7
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	3,994
	Remove Drift	465-17	Each	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	64.75
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	19
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	23
Bulk Materials Management	Material Hauling	630-03	Hours	506.50
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	205
	Clearing Roadways Travel Lanes	440-19	Miles	0
	Disposal of Debris/Litter	630-09	Cubic Yards	00

Table X

UA: Monroe

ВМР	Measurable Goal	Function Code	Unit of Measurement	Quantity
IIII Dumning	Spill Clean-Up	425-01	Each	8
Illegal Dumping Drainage	Erosion Control & Repair	440-00	Square Yards	8,666
Maintenance	Pick Up of Debris/Litter	630-10	Cubic Yards	2,900.3
Litter Collection	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	15
	Herbicide Application-Hand Method	440-12	Each	7,206
Herbicide Application	Herbicide Application-Machine Method	440-13	Acres	6,478
	Number of Licensed Applicators		Each	1
	Number of Training Hours		Hours	14
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	5,255
Maintainence	Drainage Structure Repair	450-02	Each	8
	Install Drainage Culverts	450-03	Each	4
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	900
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	49,473
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure	Clean Structural Members	465-00	Each	1
Maintainence	Clean Deck & Drain	465-01	Linear Feet	271,651
	Remove Drift	465-17	Each	0
Sure - + Sure aning	Sweeper Cleaning	540-03	Miles	4,267.5
Street Sweeping De-Icing/Anti-Icing	Snow & Ice Control	540-07	Hours	852
Materials Management	Snow & Ice Inspection/Reconnaissance	540-09	Hours	4,693
Bulk Materials Management	Material Hauling	630-03	Hours	596.5
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	36
	Clearing Roadways Travel Lanes	440-19	Miles	1.5
	Disposal of Debris/Litter	630-09	Cubic Yards	47

LDEQ- designated regulated area: Morgan City

ВМР	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	389
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	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	Acre	96
	Number of Licensed Applicators		Each	2
	Number of Training Hours		Hours	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	44
	Drainage Structure Repair	450-02	Each	0
	Install Drainage Culverts	450-03	Each	0
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	1,422
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	9,486
	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	50.5
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	389.5
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	268.5
Bulk Materials Management	Material Hauling	630-03	Hours	6
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	0
	Clearing Roadways Travel Lanes	440-19	Miles	2.3
	Disposal of Debris/Litter	630-09	Cubic Yards	100

Table XI

LDEQ- designated regulated area: Natchitoches

ВМР	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	21
	Servicing of Litter Barrels	440-03	Cubic Yards	0
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	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	594.58
	Number of Licensed Applicators		Each	1
	Number of Training Hours		Hours	12
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	0
	Drainage Structure Repair	450-02	Each	9
	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	3,106
	Install/Replace Inlets & Catch Basins	450-06	Each	1
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	59
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	71.5
Bulk Materials Management	Material Hauling	630-03	Hours	2
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	8
	Clearing Roadways Travel Lanes	440-19	Miles	0.25
	Disposal of Debris/Litter	630-09	Cubic Yards	0

Table XII

Table XIII

UA: New Orleans

ВМР	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	101.5
Illegal Dumping Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
The factor of th	Pick Up of Debris/Litter	630-10	Cubic Yards	7,668.68
Litter Collection	Servicing of Litter Barrels	440-03	Cubic Yards	0
	Pick Up of Litter (Adopt-A-Road)	440-04	Cubic Yards	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	94
	Number of Licensed Applicators		Each	13
	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	5,974.50
Maintainence	Drainage Structure Repair	450-02	Each	141
	Install Drainage Culverts	450-03	Each	9
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	56
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	58,822
	Install/Replace Inlets & Catch Basins	450-06	Each	2
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	6
Wantanie	Clean Deck & Drain	465-01	Linear Feet	88,185
	Remove Drift	465-17	Each	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	11,023.61
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	191.50
THE COLUMN	Snow & Ice Inspection/Reconnaissance	540-09	Hours	57
Bulk Materials Management	Material Hauling	630-03	Hours	102
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	90
	Clearing Roadways Travel Lanes	440-19	Miles	94
	Disposal of Debris/Litter	630-09	Cubic Yards	433.07

Table XIV

UA: Shreveport

ВМР	Measurable Goal	Function Code	Unit of Measurement	Quantity 20			
	Spill Clean-Up	425-01	Each				
Illegal Dumping Drainage	Erosion Control & Repair	440-00	Square Yards	585			
Maintenance	Pick Up of Debris/Litter	630-10	Cubic Yards	2,907			
Litter Collection	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0			
		440-05	Cubic Yards	0			
	Pick Up of Inmate Litter	440-06	Cubic Yards	478			
	Pick Up of Sheriff's Litter	440-12	Each	1,078			
Herbicide Application	Herbicide Application-Hand Method Herbicide Application-Machine Method	440-13	Acres	860			
	Number of Licensed Applicators	THE XEW	Each	2			
	Number of Training Hours		Hours/Each	8-16			
Roadside Drainage	Clean and Maintain Drainage Structures	Each	5,331				
Maintainence	Drainage Structure Repair	450-02	Each	149			
	Install Drainage Culverts	450-03	Each	35			
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	8,112			
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	0			
	Install/Replace Inlets & Catch Basins	450-06	Each	3			
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0			
Maintainence	Clean Deck & Drain	465-01	Linear Feet	19,870			
	Remove Drift	465-17	Each	1			
St. at Swanning	Sweeper Cleaning	540-03	Miles	0			
Street Sweeping De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	29.5			
Management	Snow & Ice Inspection/Reconnaissance	540-09	Hours	253			
Bulk Materials Management	Material Hauling	630-03	Hours	1,933			
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	6			
Deptile management	Roadway Clearing	440-19	Miles	1.1			
	Disposal of Debris/Litter	630-09	Cubic Yards	1,627			

Table XV

UA: Slidell

ВМР	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	258.69
	Servicing of Litter Barrels	440-03	Cubic Yards	0
CARRELL BETT	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	9
	Pick Up of Inmate Litter	440-05	Cubic Yards	118
	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	1,770.75
	Number of Licensed Applicators		Each	11
	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	92
	Drainage Structure Repair	450-02	Each	1
	Install Drainage Culverts	450-03	Each	0
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	12
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	51,332
	Install/Replace Inlets & Catch Basins	450-06	Each	1
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	10,240
	Remove Drift	465-17	Each	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	70.80
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	20
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	0
Bulk Materials Management	Material Hauling	630-03	Hours	10
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	3
	Clearing Roadways Travel Lanes	440-19	Miles	0.50
	Disposal of Debris/Litter	630-09	Cubic Yards	0

Appendix B

After the Storm Brochure

&

Understanding Water Brochure

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

 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.

cigarette butts—washed into waterbodies can choke, suffocate, or disable aquatic life like ducks, fash, turdes, and birds.

necessary

Debris—plastic bags, six-pack rings, bottles, and

 Bacteria and other pathogens can wash into swimming areas and create health hazards, often making beach closures necessary.

 Excess nutrients can cause algae blooms. When algae die, in a process that removes oxygen from the water. Fish and other aquatic the water. Fish and other aquatic organisms can't exist in water with low dissolved oxygen levels.

> Sediment can cloud the water and make it difficult or impossible for aquatic plants to grow. Sediment also can destroy aquatic habitats.

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



Honur resonnmose et paM Enneldorg a

Stormwater unoff 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.



Myat is stormmater runoff?

After the Storm



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For more information contact:

or visit
www.epa.gov/npdes/stormwater
www.epa.gov/nps

SEPA

EPA 833-B-03-002

January 200



A Citizen's Guide to Understanding Stormwater



Get Involved

Volunteers are encouraged to adopt

sections of state or federal highways to leap clean. All supplies are provided by the department. Contact the LA TD's customer service to be connected with an Adopt-A Road

You see someone sweeping yard waste into a storm drain, dumping

debris in a vacant lot, or a



coordinator in your area.

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.



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

TRANSPORTATION & DEVELOPMENT

Understanding

Stormwater

Louisiana's on the move
DOTD builds the way



http://www.dotd.la.gov/<u>high</u>ways/ construction/lab/ms4/home.asp

Appendix C

Make Changes, Be the Solution! Poster



MAKE CHANGES BETHESOLU-FON

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
- O Don't litter



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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 2016-2017 (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:

City, State and Zip:

(225) 248-4178

Phone Number:

Dori Turner, Environmental Impact Specialist
Contact Name and Title:

Baton Rouge, LA 70806
City, State and Zip:

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, 2016-June 29, 2017

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, 2016 through June 29, 2017.
- 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, 2016 through June 29, 2017.
- Messages should air, 3-4 per month, over the year-long schedule.
- One (1) "In Good Company" feature article in LPB Visions magazine (August 2017).
- 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 2016-2017 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 2017. The sponsor agrees to remit invoice(s) within 30 days of invoiced date(s).

TOTAL AMOUNT: \$1,500.00 NET-May 2017

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.

Witness:

Effective Date: June 20, 2016 End Date: June 29, 2017

Sponsor approval by:

Foundation for Excellence in LPB approval by:

Witness:

Date:

all Illian

Date:



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:

City, State and Zip:

(225) 248-4178

Phone Number:

Dori Turner, Environmental Impact Specialist
Contact Name and Title:

Contact Name and Title:

dori.turner@la.gov
Email:

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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:

Foundation for Excellence in LPB approval by:

Witness:

Dag (0/X/17)

Witness:

Date:

LPB Digital

Log Performance Report Page: 1		00:30:04 06/16/16 SMTWTFS LUC DV 2006-2007 06/29/17 YYYYYYY UPDATED 6/30/201
Log Per Page: 1	Notes	06/16/16
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19:59:29 09:59:29 18:59:29

IN GOOD COMPANY

ENVIRONMENTAL EFFECTS OF THE AUGUST 2016 FLOOD

In 2016, many areas of Louisiana received arastrophic flooding. Louisiana's governor, mental impact for all affected parishes. The John Bel Edwards, called the disasters "hisroric, unprecedented flooding events" and declared a state of emergeney for communities in North and South Louisiana. This environmental impact has advantages and disadvantages, according to the Louisiana Department of Transportation and Develbooding had an economic and environopment's Materials Lab.

and ground water. Improved plant growth is take advantage of the nutrients deposited by are strategically located in flood plains .. to lowing floods. That is why sugarcane farms nourishment provided to soil by deposited nutrients and the replenishment of surface often seen in landscaping and pastures fol-The main advantage in flooding is the flood water.

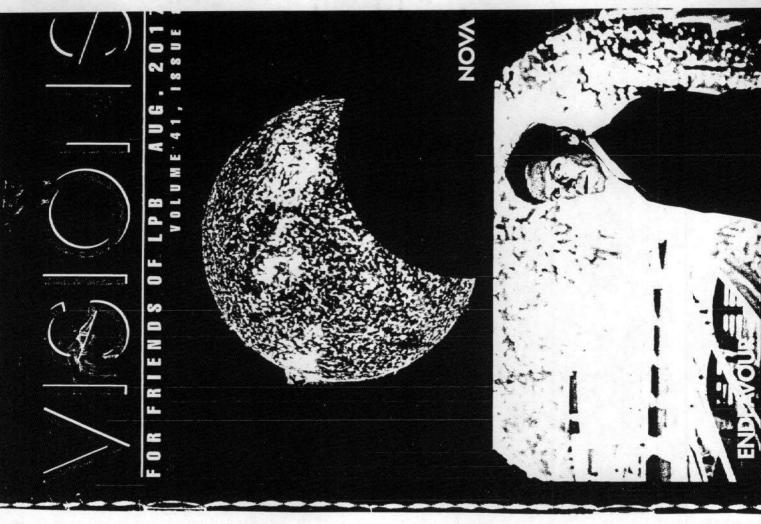
the receding of the water, many unforeseen ous. Just like storm water, this water doesn't with DOTD's Marerials Lab explain it this water like rivers, canals, streams, and bavproblems arise in flooded areas. Officials After the devastation of the flood and way, "Flood water ends up in bodies of

go through treatment systems to filter out a contain debris, pollutants, chemicals and/or nazardous materials which can ultimately affeet drinking water systems and recreational majority of the contaminants. Flood waters also affect the health and well-being of wild activities. Contaminants in flood water can ife and many animals and insects die from this intrusion of their habitat.

marion and helpful tips on how to handle a Water page under the Materials Lab section and trush are stored properly disposed of or variety of contaminants is available at www. select Divisions from the drop-down menu. contains all this information including con-Louisiana cirizens, however, can do their sure that all chemicals, hazardous materials and then Marerials Lab. The (MS4) Storm tacts for questions and reporting purposes. The Louisiana's DOTD Materials Lab, is a thooding by making preparations before a stored prior to a storm or flooding, Infor-Select Engineering from the Divisions list storm, PREPARATION is the key, Make part to lessen the contaminating effect of dord.la.gov. Click Inside LaDOTD and long-time supporter of LPB.

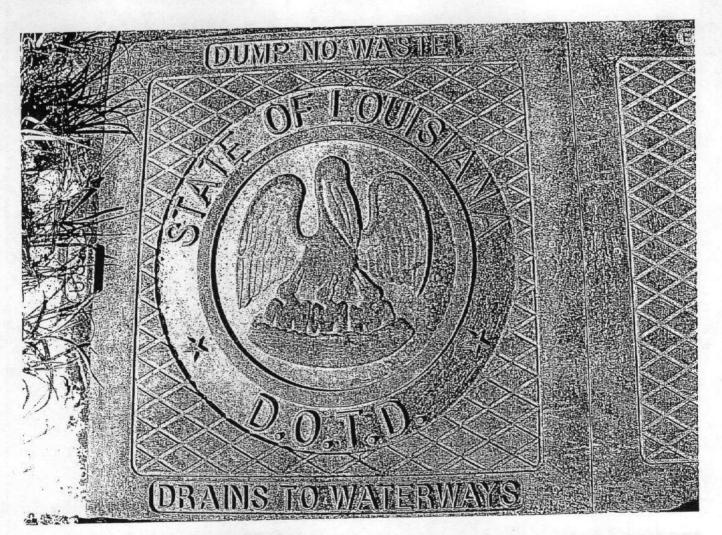


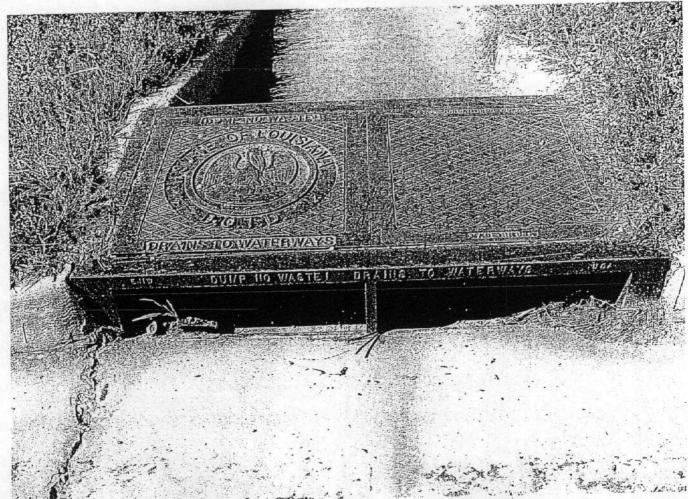
LETA FULL BOARD - THURSDAY, AUGUST 10 NOON FREINDS - TUESDAY, AUGUST 1 AT 11:30 MEETINGS



Appendix E

Catch Basin Cover Photograph





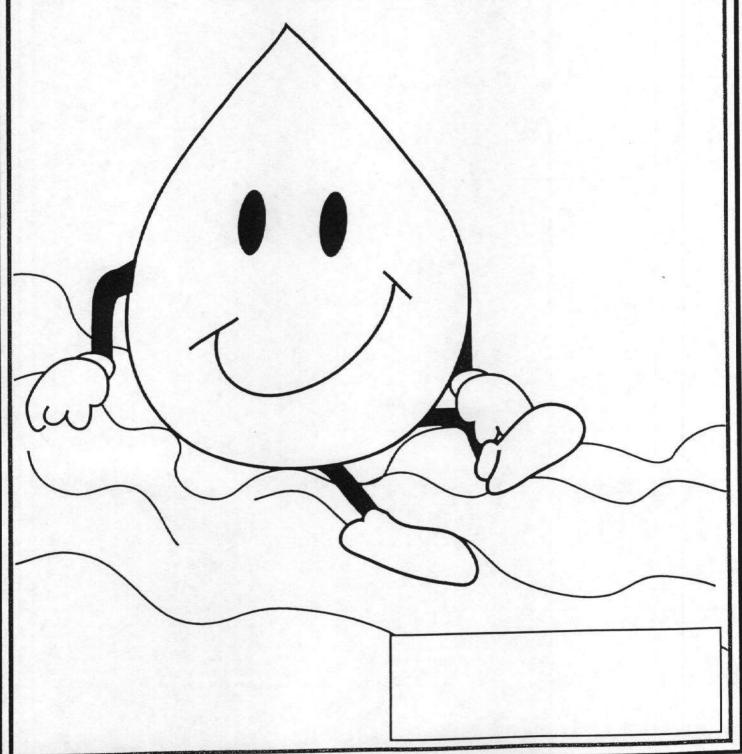
Appendix F

Educational Materials Packets

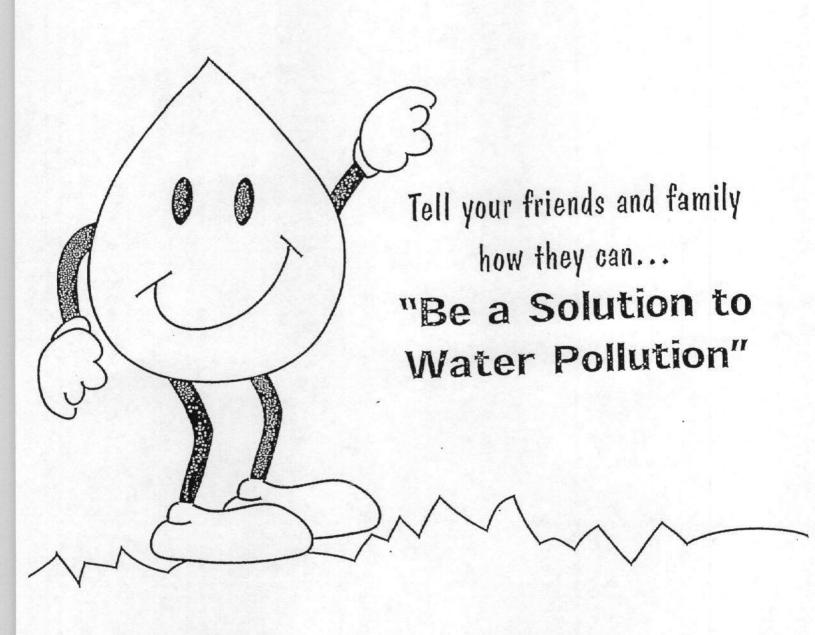
ACTIVITY BOOKLET

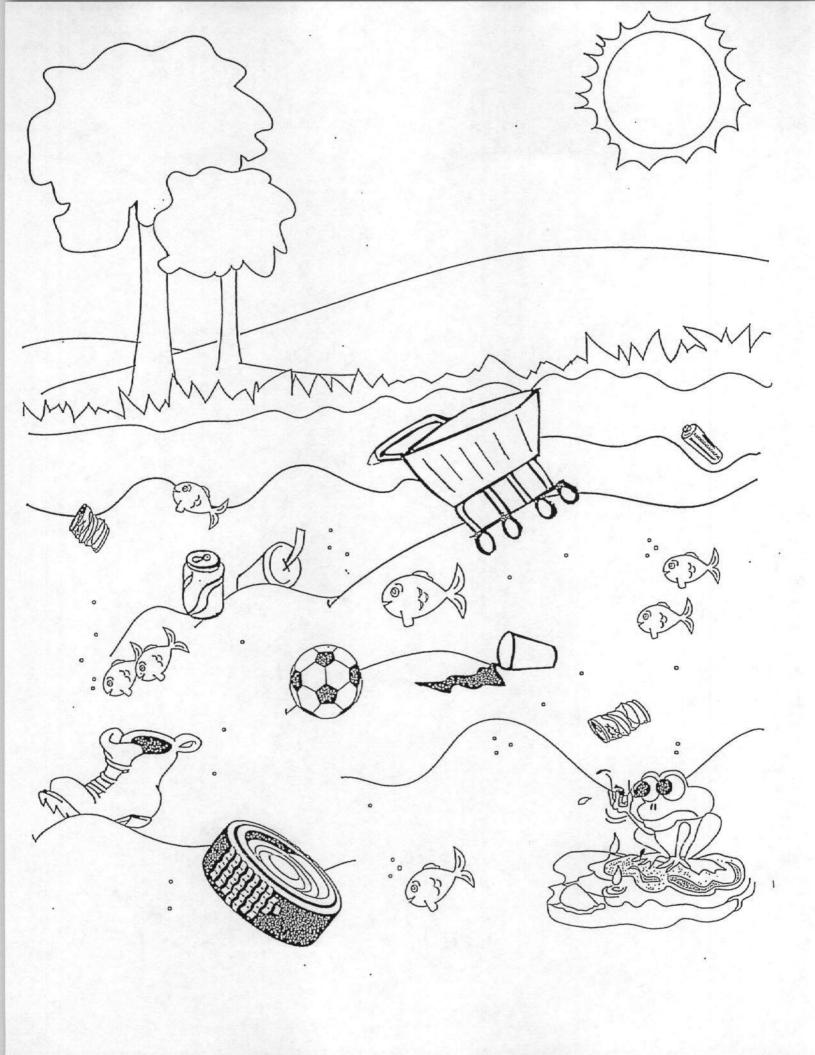
Be a Solution to Water Pollution

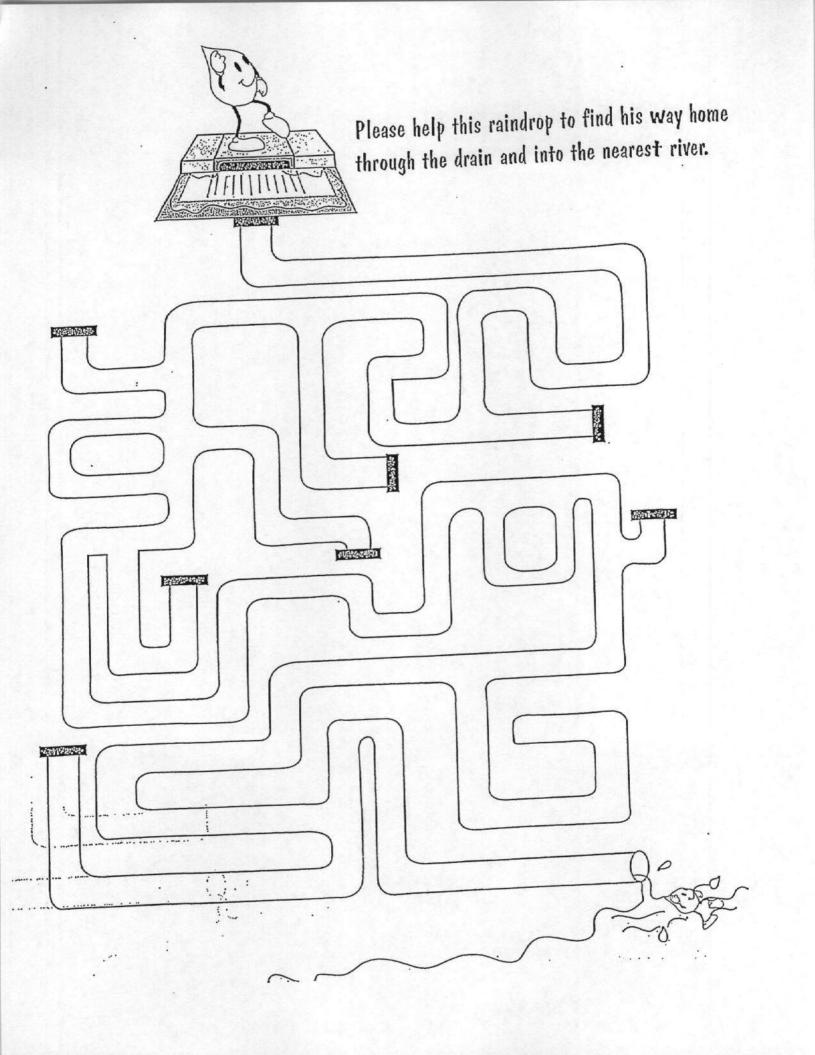
ACTIVITY BOOK



Have you ever walked next to a stream and seen trash the time in the water runs off the 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.

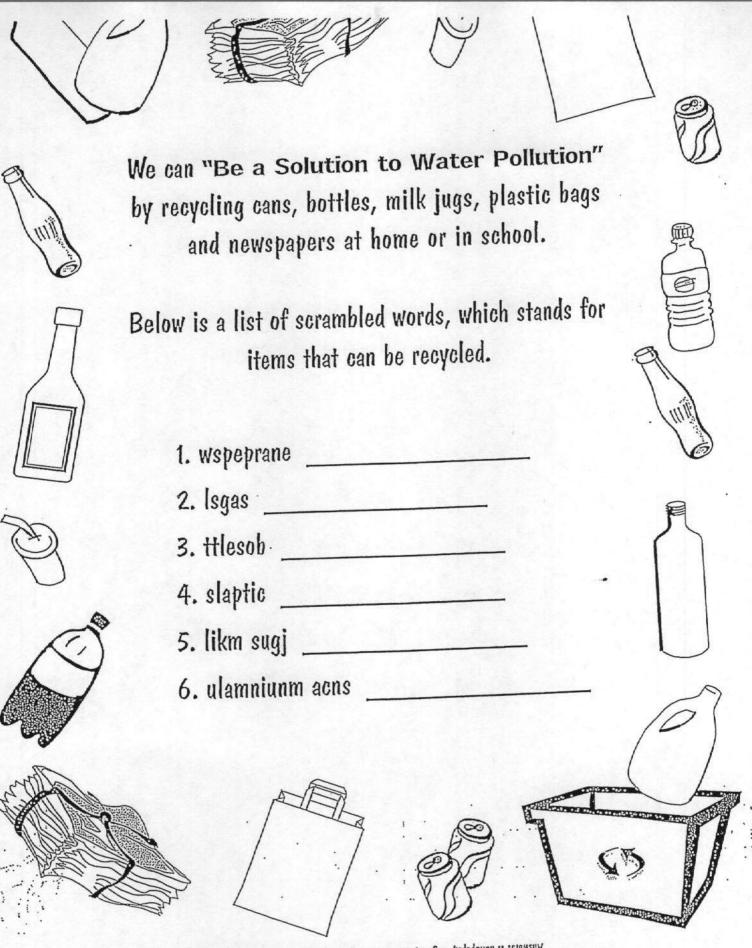






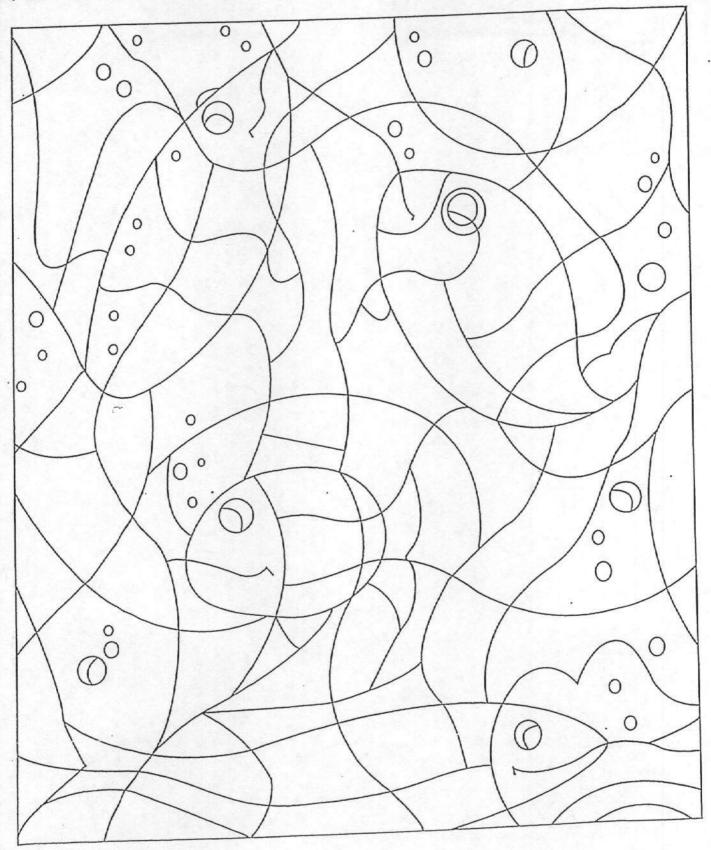
collected by rainwater and dumped into a nearby storm drain of into a river, lake or stream. Carry a plastic or paper bag with you to pick-up after dogs and throw it in the trash.





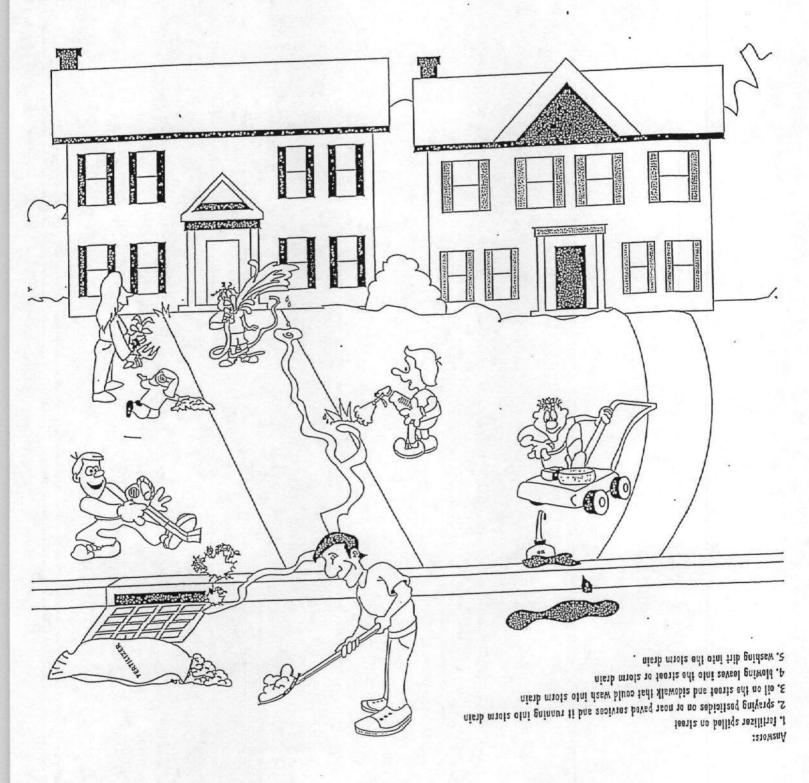
chemicals and other pollutants cause narm to usu.

Find the fish and color them in.

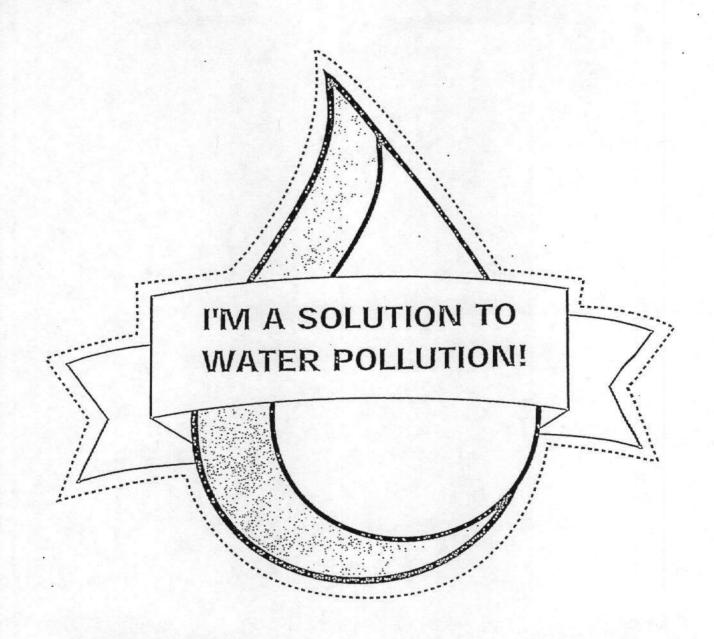


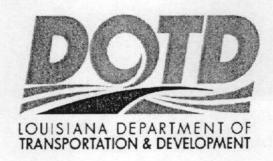
When helping to clean a yaru, remember not to damp anything drain or in the street. Can you find what is wrong with this picture?

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



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





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/

The Be a Solution to Water Pollution Activity Book was reproduced with permission from the

Clean Water Campaign

40 Courtland Street, NE

Atlanta, GA 30303

Email: info@cleanwatercampaign.com

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

STICKERS



















lunk from the Gutter

That's Our Front Door

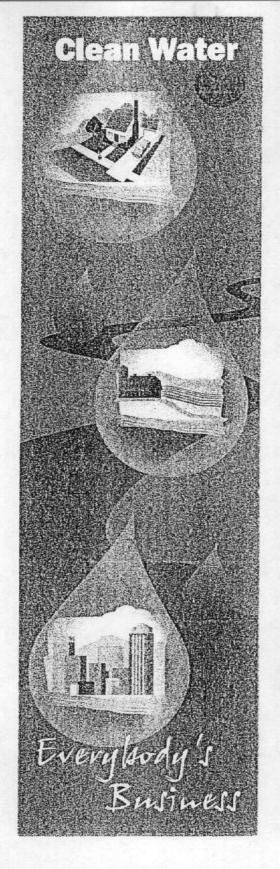
Please Don't Pour



Please Don't Mix!

Makes us Sputter

BOOKMARK





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 pare 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



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 call the Customer Information Line, toll-free at (866) 590-0065 of SUBMIT completed form by either U.S. First Class Mail to DOTI P.O. BOX 94245, Baton Rouge, LA 70804-9245, by fax to (225) dotdpublicrecords@la.gov. DO NOT ATTACH PAYMENT WITH WAIT to receive a notice of estimated costs. Once received, ser Copies will be mailed upon receipt of payment or copies can be days pass after notice is sent and payment is not received, it will	or PRINT: If you have questrons, please rocally at (225) 242-4609 Custodian of Records, HQ — EW 3 rd Floor, 242-4690 or by emailing your request to 11 THIS FORM. Indicate the payment (Check or money Order ONLY). Picked up with payment, If 10 (ten) working
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 dates, and other details about the type of record of interest to you. Official R/OW map the large volume of some state project records, it may be necessary for the custodian to the large volume. In this case, it is required that the requestor review the records to be duplicated.	s are located at the Parish District Court, ** Due to ake additional time to accumulate the info from

Appendix H

MS4 Outfall Survey & Illicit Discharge Visual Screening Form



Louisiana Department of Transportation and Development

Illicit Discharge Visual Screening

Date:		Investigator:
Municipality:		Outfall ID:
Location:		
Discharge at time	e of inspection: DYes ONo	Photo taken: □Yes □No Photo #:
If YES, complete:	section A. If NO, skip section A an	d 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	
Is there any evide	S nce of previous illicit discharge?	ection B-No Discharge Present
If YES, please desc		ares and
Potential Source o	of Illicit Discharge:	
		Section C
Comments		
		맞는 얼마 없는데 하는데 뭐 되었다면데요. 그렇게 그렇게 모르는 그 모르는



Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

		investigator.	
Parish:	The state of the s	Municipality:	
Route:			
FIELD DATA			
Outfall ID:			
Location/Address:			
Latitude:		Longitude:	
Receiving Water:			Impaired: □Yes □No
		Land Use:	
□Industrial OUTFALL DESCRI	□ Residential PTION	□Commercial □Open Space	e Other:
□Industrial OUTFALL DESCRI	PTION	□Commercial □Open Space	
OUTFALL DESCRI			Ditch
OUTFALL DESCRI	PTION	Material Type	
Material Type Pipe Height	PTION	Material Type Depth	
OUTFALL DESCRI	PTION	Material Type	

Appendix I

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



Acknowledgment of Training

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 23, 2017

Topic	Time
Introduction, Agenda	8:00 - 8:15 a.m.
Mr. Joubert Harris	
Program Update	8:15 - 8:30 a.m.
Ms. Janaye Tate	
Permitting DOTD Facilities	8:30 - 9:00 a.m.
Mr. Nicholas Larks	
Inspecting and Testing Collection Systems	9:00 - 9:30 a.m.
Mr. Roy Lowery	State Maria and the first of th
Drinking Water After A Flood	9:30 - 10:00 a.m.
Ms. Nikita Simon	
Stormwater Video	10:00 - 10:30 a.m.
Ground Control	
Lead In Drinking Water	10:30 - 11:00 a.m.
Ms. Kenya Lewis	7.5.5
Health Effects Associated With Wastewater Treatment,	11:00 - 11:30 p.m.
Disposal, and Reuse	11:00 - 11:50 p.m.
Mr. Nicholas Larks	
Lunch Break	11:30 - 12:30 p.m.
MS4 Report	12:30 - 1:00 p.m.
Dori Turner	
Stormwater Video	1:00 - 1:30 p.m.
Stormwater Video Illicit Discharge Detection & Elimination	1:00 - 1:30 p.m.
Illicit Discharge Detection & Elimination	1:00 - 1:30 p.m. 1:30 - 2:00 p.m.
Illicit Discharge Detection & Elimination Measurement and Control of pH in Wastewater	
Illicit Discharge Detection & Elimination Measurement and Control of pH in Wastewater Ms. Nikita Simon	
	1:30 - 2:00 p.m.
Measurement and Control of pH in Wastewater Ms. Nikita Simon Wastewater Video After the Storm Homebuyers Guide to Septic Tanks	1:30 - 2:00 p.m.
Measurement and Control of pH in Wastewater Ms. Nikita Simon Wastewater Video After the Storm Homebuyers Guide to Septic Tanks	1:30 - 2:00 p.m. 2:00 - 2:30 p.m.
Measurement and Control of pH in Wastewater Ms. Nikita Simon Wastewater Video After the Storm Homebuyers Guide to Septic Tanks Mr. Roy Lowery	1:30 - 2:00 p.m. 2:00 - 2:30 p.m.
Measurement and Control of pH in Wastewater Ms. Nikita Simon Wastewater Video After the Storm Homebuyers Guide to Septic Tanks Mr. Roy Lowery Wastewater Video	1:30 - 2:00 p.m. 2:00 - 2:30 p.m. 2:30 - 3:00 p.m.
Measurement and Control of pH in Wastewater Ms. Nikita Simon Wastewater Video	1:30 - 2:00 p.m. 2:00 - 2:30 p.m. 2:30 - 3:00 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			F	AP No		
Contractor					Route	
Days Since Last Ra	infall:			Amount of	f Last Rainfall	inches
Station No.	LI./RI.	Туре	Need	Is Erosion Item Stable ?	Is There Evidence Of Washout or Over-Topping?	Condition & Comments on Effectiveness
						in the second se
Maintenance requ	ired for Er	osion (Control Meas	sures:		
o be performed by					On or Before:	
'ypes of Measures	:					
- Silt Fence - Hay/Straw Bales		- Sedin - Slope	nent Basin Drain		- Matting - Other	

G- TemporarySeeding

H. None But Stabilization Measure Populand

:- Hay Check Dam

1 - Stone Check Dam

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

Transfer to the second	Single Control of the		
	0 % Co1 ()	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-store Weather at time of inspection		ring storm event	ent Other
		Records	
NOI available, if applicable?			
□Yes □No	□Yes □No	□Yes □No	□Yes □No
Are the self inspections curre		ares and	-100
☐Yes ☐No		Date of last self inspection:	
Corrective action log availab	le?		
□Yes □No			
		ite Specific BMPs	
	BMP Installed		
BMP Description	& Operating	Compatible Latter Needed	Proposed date for corrective action & responsible person
. Divir Description	Properly? □Yes □No	Corrective Action Needed	action & responsible person
	UYes UNo		
	☐Yes ☐No		
	☐Yes ☐No		
	☐Yes ☐No		
		V	
	TYes TNo		

	BMP Description	Properly?	Corre	ctive Action Needed	action & responsible person
1		☐Yes ☐No			
2		☐Yes ☐No			
3		☐Yes ☐No			
4	Thereon the state in	☐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 ONo			
13		☐Yes ☐No			
		$\overline{\mathbf{c}}$	verall Site E	eatures	
r:();	[1995] "自然传统关系"。	(4, 86 M × 6 M)		Corrective action	Proposed date for corrective
	BMP/activity	Implemented?	Maintained?	Needed	action & responsible person-
1	Are all slopes & disturbed				

1	stabilized?	☐Yes ☐No	DYes DNo	
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?	. UYes UNo	□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 ·		□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:	

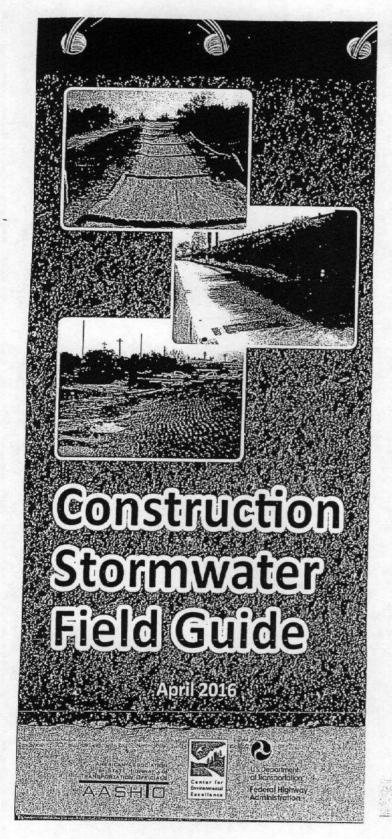




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Appendix K

De-icing/Anti-icing Agents-Statewide

MAINTENANCE UNIT MONTHLY USAGE: SALT, GRADE 1, 50 LB/SACK

	T		2017 T-1-1
	January	December	2017 Total
002/G510 - WEST BANK MAINT/MAINT		358	358
002/G520 - WEST BANK MAINT/MAINT		4	4
002/G530 - EAST BANK MAINT/MAINT		441	441
002/G540 - BRIDGE MAINTENANCE/MAINT		75	75
002/G550 - BRIDGE MAINTENANCE/MAINT	1000000	98	98
002/G727 - DIST DRAINAGE RDWY/MAINT		151	151
003/G510 - MAINTENANCE/RD MAINT		147	147
003/G520 - MAINTENANCE/RD MAINT	100	351	351
003/G540 - MAINTENANCE/RD MAINT	175	208	38
003/G550 - MAINTENANCE/RD MAINT	76	23	99
003/G560 - MAINTENANCE/RD MAINT		98	91
003/G570 - MAINTENANCE/RD MAINT		149	149
003/G765 - ROADSIDE MAINT/RD MAINT		196	19
004/G510 - ARCADIA/CASTOR UNITS	236	179	41
004/G520 - HOMER UNIT/MAINT	95	35	13
004/G530 - MINDEN/LETON UNITS	438	225	66
004/G540 - BOSSIER/PLAIN DEALING	265	40	309
004/G550 - SHREVEPORT/VIDRINE UNITS	343	102	44
D04/G560 - MANSFIELD UNIT/MAINT	284		284
004/G570 - COUSHATTA UNIT/MAINT	403		403
D05/G51D - MAINTENANCE/MONROE	113		113
D05/G520 - MAINTENANCE/MONROE	169	14	183
D05/G530 - MAINTENANCE/MONROE	58		58
D05/G540 - MAINTENANCE/MONROE	203	50	25
D05/G550 - MAINTENANCE/MONROE	1,206	128	1,33
D05/G550 - MAINTENANCE/MONROE	294	147	44
	1,715	831	2,54
DOS/GS70 - MAINTENANCE/MONROE	84	41	12
DOS/GS80 - MAINTENANCE/MONROE	41	20	6
D05/G590 - MAINTENANCE/MONROE	1.2	449	44
D05/G760 - CONCRETE REPAIR	55	108	16
D07/G520 - DERIDDER/MAINT	38	100	3
D07/G540 - JENNINGS/MAINT	30	73	7
D07/G580 - OBERLIN/MAINT	2 117	250	2,36
D08/G510 - MAINTENANCE/ALEX	2,117	314	1,08
D08/G520 - MAINTENANCE/MARKSVILLE	774	514	
D08/G530 - MAINTENANCE/MANY	373	04	37
D08/G540 - MAINTENANCE/LEESVILLE	726	94	82
D08/G550 - MAINTENANCE/NATCHITOCHES	1,053	65	1,11
D08/G560 - MAINTENANCE/WINNFIELD	184		40
D08/G570 - MAINTENANCE/DRY PRONG	401	632	63
D08/G710 - DISTRICTWIDE ROAD MAINTENANCE	202	0.000	42
D58/G510 - CALDWELL PRH/MAINT	352	69	36
D58/G520 - FRANKLIN PRH/MAINT	341	27	9
D58/G530 - TENSAS PRH/MAINT	63	35	47
D58/G540 - CATAHOULA PRH/MAINT	464	15	
D58/G550 - CONCORDIA PR/MAINT	160	35	19
D58/G580 - LASALLE PRH/MAINT	228		22
D61/G510 - PRH MAINT CREW/UNIT 2	395	362	75
D61/G520 - PRH MAINT CREW/UNIT 2	41	586	
D61/G540 - PRH MAINT CREW/BR	462		55
D61/G550 - PRH MAINT CREW/BR	139		65
D61/G560 - PRH MAINT CREW/UNIT 2	221	202	
D61/G580 - PRH MAINT CREW/UNIT 2	68	66	12
D61/G590 - PRH MAINT CREW/BR	81	298	3
D61/G765 - PRH MAINT ROADSIDE DEV/UNIT 5	539	1,184	1,7
D62/G530 - MAINTENANCE/MAINT	149	352	50
D62/G540 - MAINTENANCE/MAINT		231	23
D62/G550 - MAINTENANCE/MAINT	119	313	43

MAINTENANCE UNIT MONTHLY USAGE: SALT, GRADE 1, 50 LB/SACK

Grand Total	16,118	11,385	27,503
D62/G765 - ROADSIDE DEVELOPMENT	NAME OF THE OWNER OWNER OF THE OWNER OWN	86	86
D62/G580 - MAINTENANCE/MAINT		21	21
D62/G570 - MAINTENANCE/MAINT	84	323	407
D62/G560 - MAINTENANCE/MAINT	195	307	502
D62/G555 - MAINTENANCE/MAINT	98	167	265

MAINTENANCE UNIT MONTHLY USAGE: SALT, GRADE 1, 50 LB/SACK

2017			
Urban Area	January	December	2017 Total
Abbeville Regulated Area		98	98
Alexandria Urbanized Area	2,117	882	2,999
Bastrop Regulated Area	203	50	253
Baton Rouge Urbanized Area	1,056	2,661	3,717
Hammond Regulated Area	119	420	539
Houma Urbanized Area		98	98
Lafayette Urbanized Area		547	547
Mandeville-Covington Urbanized Area	84	323	407
Monroe Urbanized Area	1,206	577	1,783
Natchitoches Regulated Area	1,053	66	1,119
New Orleans Urbanized Area		954	954
Shreveport Urbanized Area	532	40	572
Grand Total	6,370	6,716	13,086

MONTHLY USAGE: AGGREGATE, LIGHTWEIGHT, F/DEICING

(YD3 - Cubic Yard)

	THE SA			20	017								
Location Conducting Operations	January	February	March	April	May	June	July	August	September	October	November	December	2017 Total
		0.1					0.1	1.0				The later	1.2
D03/G510 - MAINTENANCE/RD MAINT				0.0	0.0	6.0	1.8		3.8		0.8	3.5	21.0
D03/G520 - MAINTENANCE/RD MAINT		4.0		0.3	0.9	6.0					0.0		3.6
D03/G580 - MAINTENANCE/RD MAINT							1.7		2.0				
D07/G510 - ROADWAY MAINT	6.5	9.0	4.5	4.0	0.5	1.5	8.5	1.5	1.0	3.5		34.0	_
	10.0											10.0	20.0
D07/G520 - DERIDDER/MAINT	10.0		2.0						1.0			10.0	13.0
D07/G540 - JENNINGS/MAINT			2.0				_		1.0			4.0	
D07/G570 - CREOLE/MAINT	7.9									3.0			
D07/G580 - OBERLIN/MAINT												10.0	
Grand Total	24.4	13.1	6.5	4.3	1.4	7.5	12.1	2.5	7.8	6.5	0.8	71.5	158.3

MONTHLY USAGE: AGGREGATE, LIGHTWEIGHT, F/DEICING

(YD3 - Cubic Yard)

Urban Area January February March April May June July August September October November December 2017 Total Lafayette Urbanized Area 4.0 4.0 0.3 0.9 6.0 1.8 3.8 3.8 3.8 34.0 74.5 Lake Charles Urbanized Area 6.5 9.0 4.5 4.0 0.5 1.5 1.5 1.5 3.5 3.5 37.5	0000	0.10	0.0	3.3	4.8	1.5	10.3	7.5	1.4	4.3		13.0	6.5	Grand Total
January February March April May June July Augus 4.0 0.3 0.9 6.0 1.8 6.5 9.0 4.5 4.0 0.5 1.5 8.5 1	95 5	27 5	00	2 7									0:0	rave citaties of patitized vica
January February March April May June July Augus 4.0 0.3 0.9 6.0 1.8	(4.5	34.0		3.5	1.0	1.5	8.5	1.5		4.0	4.5	9.0	6.5	Take Charles Historiand Area
January February March April May June July Augus 4.0 0.3 0.9 6.0 1.8	7/5	240							ı					Larayette Orbanizeu Area
January February March April May June July Augus	O.T.	0.0	0.0		3.8		1.8	6.0		0.3		40		Information Area
2017 Tennery February March April May June July Augus	21 0	3 €	00)		I		1	1			January	Olball Mica
	701/ Intai	December	November	October	September	August	July	June	May	April	March	February	lanuary	History Area
7017	2017 Total	Parambar .							-					
								•	201					

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

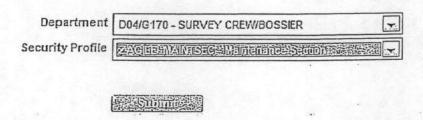
This Guide was produced to assist you with your day to day work functions, if you would like to use the LaGov help scripts they are available from the DOTD's Intranet. Use the menu path below to begin:

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
- 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 Logon
- 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

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.

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ANSWER FOR MY SIGNATURE
FOR FILE
FOR YOUR INFORMATION
FOR SIGNATURE
RETURN TO ME
PLEASE SEE ME
PLEASE TELEPHONE ME
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ROAD

EROSION CONTROL GUIDELINES



HYDRAULICS UNIT

PLAN CHECKING AND DESIGN PROCEDURES FOR EROSION & SEDIMENT CONTROL

SUPPLEMENT TO HYDRAULICS MANUAL

NOVEMBER



FILE NO.

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

INTRADEPARTMENTAL CORRESPONDENCE

HYDRAULICS OFFICE (225)379-1306

MEMORANDUM

TO:

ROAD DESIGN SECTION

BRIDGE DESIGN SECTION CONSTRUCTION SECTION

CONTRACTS & SPECIFICATIONS SECTION

DISTRICT DESIGN OFFICES

FROM: Jack Manno, P. E.

Hydraulics Engineer Administrator

DATE: June 1, 2005

SUBJECT: DESIGN POLICY ON EROSION CONTROL

With the issuance of Phase II (March 2003) and recent renewal of Phase I (October 2004) of Louisiana Pollutant Discharge Elimination System (LPDES) Storm Water General Permits for Construction Activities, the Department is paying closer attention to how it addresses the control of storm water runoff from its construction sites. To facilitate this effort, DOTD has in part, developed policies for designers such that controlling erosion and sediment on the job site becomes part of the overall design process. The development of guidelines, or plan review procedures, to address storm water runoff and consequential erosion problems is required as part of our state's overall Storm Water Management Program. Consultants and in-house designers alike must now prepare project specific plans for controlling erosion and sediment loss on state projects for which these permits pertain.

The designer should understand that the erosion and sediment control plan must be viewed as only a "first appraisal" to what must be implemented. Drawings are to be designed, reviewed, and implemented with the intent that they will be modified as construction activities progress. Including controls on the plans and checking them in the field will provide us with better estimates of quantities for pay items. This in turn, will assist the contractor in preparing an erosion control plan to submit to the Department. During the plan-in-hand visit, designers should look for the locations where, and the nature of, any existing or potential erosion problems, locations where temporary controls could or could not be placed, and locations where permanent, post-construction controls may need to be placed. A final estimate of erosion control items should be made after the plan-in-hand visit.

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FOR FILE

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FOR APPROVAL

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Attached is a document entitled "Plan Checking and Design Procedures for Erosion and Sediment Control on LA DOTD N/LPDES Permitted Projects". These procedures were developed based upon a conglomeration of current DOTD policies, specifications, and the AASHTO Highway Drainage Guidelines Manual, Volume III - AASHTO Guidelines for Erosion and Sediment Control in Highway Construction.

Some changes were made to DOTD policies based upon current permitting requirements. The most noteworthy changes are:

✓ Most temporary erosion controls will now be included on the plan or construction sequencing sheets.

✓ The installation and removal of erosion controls are now included in the phasing notes on the construction sequencing sheets.

✓ A new symbol legend for temporary erosion controls has been developed.

√ The locations of erosion controls are more clearly specified. This should aid in better quantity estimates and hopefully, fewer plan changes.

Also attached are four examples for incorporating erosion and sediment controls into the plans, as well as a symbology sheet. The first example is a portion of a set of plans showing specific locations, as well as quantities for erosion controls. This project was commended by the FHWA for its effort in identifying the need for and handling of erosion control items.

The attached guidelines have been approved by the Chief Engineer (see attached memo dated 3/10/05). They are to be included as an addendum to the LA DOTD Hydraulics Manual. This letter should serve as a notice to your employees and our consultants. Further information can be obtained by contacting Julie Taylor, Hydraulic Design Engineer at (225) 379-1931.

- c: N. Kent Israel, Road Design Administrator
- c: Hossein Ghara, Bridge Design Administrator
- c: Rick Holm, Chief of Construction Division
- c: Neal Thibodeaux, Contracts & Specifications Administrator
- c: Ronnie Robinson, Jesse McClendon, Nicholas Verrett, Jr., Patrick Landry, Paul Colquette, Don Maddox, Teddy Babin, Michael Stack, District Design, Water Resources, and Development Engineers
- c: Ken Mason, District Design and Traffic Engineer
- c: Roy Dupuy, Chief Landscape Engineer
- c: Ed Bodker, Environmental Impact Manager



DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

INTRADEPARTMENTAL CORRESPONDENCE

HYDRAULICS OFFICE (225)379-1306

MEMORANDUM

TO:

OFFICE OF THE CHIEF ENGINEER

Mr. William H. Temple, P. E.

DOTD Chief Engineer Administrator

FROM: Julie Taylor, P. E. Hydraulic Design Engineer

Road Design/Hydraulics Unit

DATE: March 10, 2005

SUBJECT: PROPOSED DESIGN POLICY ON EROSION CONTROL

For reasons specified herein the attached documents, a draft set of plan checking and design guidelines has been developed for use on DOTD NPDES permitted projects. These guidelines could result in noticeable changes to the current plan preparation methods. The intent is to satisfy federal regulators while at the same time, providing a more definitive erosion control plan with better quantity estimates and fewer plan changes. In order for designers to develop an effective erosion and sediment control plan, they must understand what is required for effective sediment and erosion control, as well as what is required to complete inspections in the field. This means producing clear and practical drawings such that the contractor understands how to install and maintain specified erosion controls, including Best Management Practices (BMPs). Ideally, plans should indicate where erosion controls (or BMPs) are to be installed, and when, or at what phase of construction, to install them.

The attached package was circulated to each of the major design sections and to construction personnel at headquarters as well as to the district design offices. A copy of the cover letter is attached. Feedback has been incorporated into the latest draft of the guidelines as attached here. These guidelines have been developed with the intention of including them as an addendum to our Hydraulics Manual. I am asking your office to review this package, and provide any comments or suggestions and/or approval for the proposal.

Should there be any questions, please contact Mr. Jack Manno (3-1306) or myself (3-1931).

c: Jack Manno, Hydraulic Engineer Administrator

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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 <u>Roadway Design Procedures and Details Manual (RDM)</u> 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 <u>initial placement</u>. 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

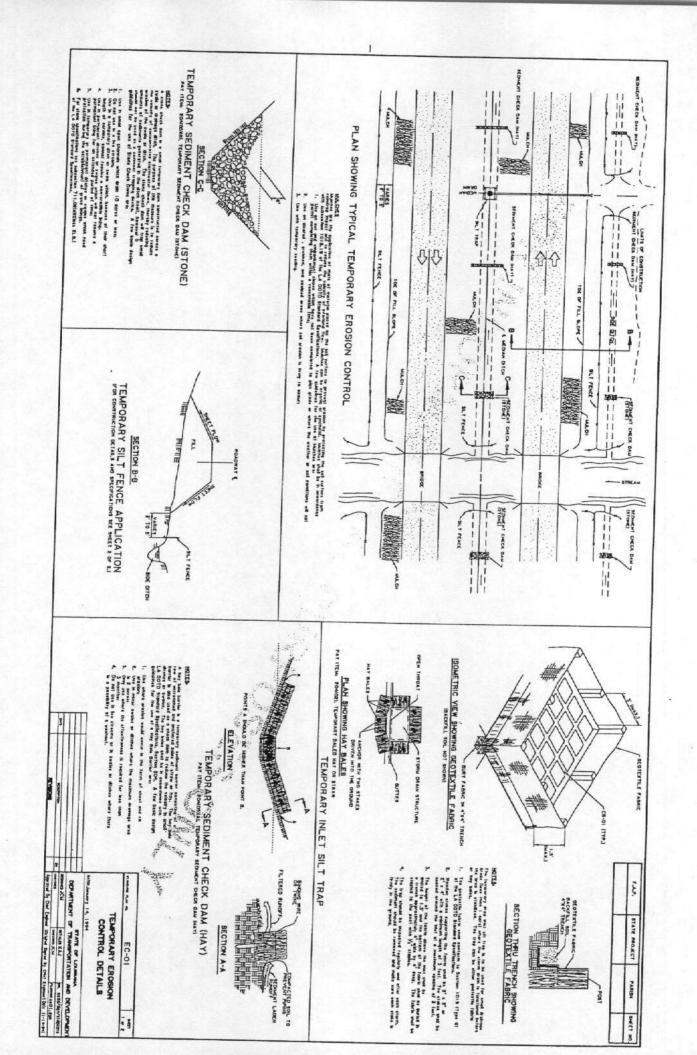
TEMPORARY EROSION AND SEDIMENT CONTROL SHEETS

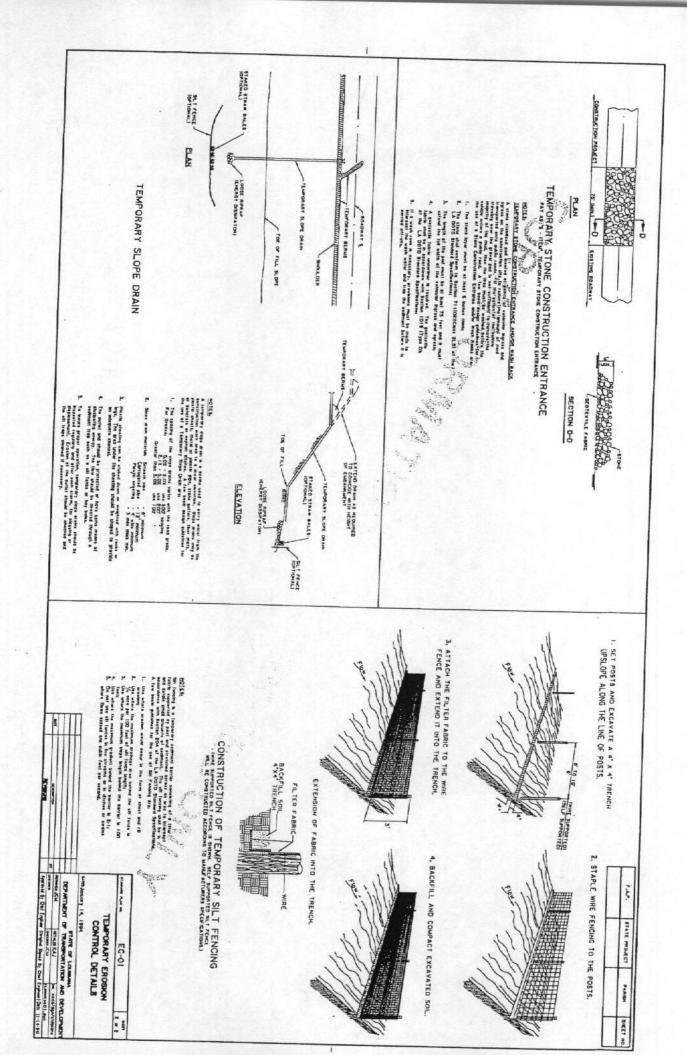
The designer has the option of placing temporary erosion and sediment control measures on separate sheets. These should consist of layout sheets (similar to a construction sequence sheet) at a minimum scale of 1:000 or 1"= 80'. Layout sheets should indicate drainage patterns and, like the construction 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



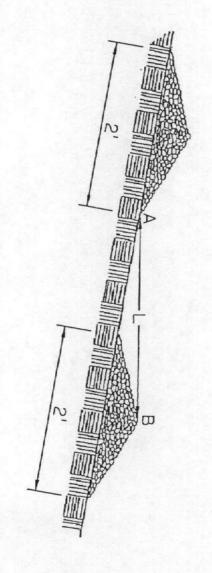


TEMPORARY EROSION & SEDIMENT CONTROL SYMBOLOGY

	TEMPORARY SLOPE DRAIN
	INLET PROTECTION
(ইথইম)ইথইম	CHECK DAM (HAY)
	ENTRANCE
300 Sept. Se	SEDIMENT CHECK DAM (STONE)
יננגנונינגנונונונונוניניניניי	TEMPORARY BERM
SFSF	SILT FENCE

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.:			
F.A.P. NO.:			
NAME:			
	PLAN-IN	-HAND PARTY	
NAME	TITLE	AGENCY	SECTION
8			
		1	
	·		
	1000		

PLAN-IN-HAND INSPECTION REPORT

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

YES NO COMMENTS

P	LAN PROFILE SHEETS:				
].	Is adequate right-of-way provide for relocation of utilities?	d			
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?				
0.	Are there any oil or gas wells on the project that do not show up on the plans?				1 1 2 2 1

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

YES NO COMMENTS Check for conflicts between new 6. roadway and existing roadway being used to maintain traffic. Method of payment for detour (if 7. required). 8. Can drainage be maintained during construction? GENERAL:]. If sub-surface drainage is being used, is there any evidence of effluent sewerage entering existing roadside ditches? Are all utilities shown? Pipelines 2. shown in profiles, if applicable? Have 60% comments been 3. received from the District? Are there any major utility 4. conflicts? Are there any major right-of-way 5. .conflicts? 6. Will sawed joints be required for limits of pavement removals (including walks, drives, crossovers etc.)? If yes, is the method of payment satisfactory? 7. Will any materials be salvaged?

If so, where should this material

be hauled?

	COMENTS .	NO	YES		-
				Is there any extra-ordinary maintenance problems or procedures anticipated as a result of the proposed project?	8.
				Is a clearing and grubbing project recommended?	9.
				Will surcharging the embankment be required?	10.
				Are there any proposed permit requests that will affect this project? (404, NW,	11.
				Are the drainage and construction servitude large enough for equipment mobilization?	12.
				If this project creates any additional mileage for our system has Planning been notified for potential exchange with cooperating agency?	13.
		-		Do any recommended changes exceed the original scope of the project?	14.
				Does the limit/scope of the project match those in the environmental document?	15.
				Are there any mitigation items that need to be addressed in plan development?	16.
у	the roadwa	erning	ns conc	that need to be addressed in plan	7. List

YES NO COMMENTS

BI	RIDGE PLANS				
1.	Is stationing of beginning and en- of existing bridge shown?	d			
2.	Is description of existing bridge shown?				
3.	Is high water elevation shown?				1 3
4.	Is drainage area shown?				
5.	Is required area of opening shown?		·		Ÿ
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?	62			_
11.	Is detour required? If yes, (A) has the location, type, length, width, area of opening, surfacing, and other details been shown?				

		YES	по	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?			

1000-2-10-2		YES	ИО	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.	Record of Existing Structure:			
27. Li	st below any comments or recommend	lations o	сопсел	ning this structure.
	t below any special considerations or ag			

List below any additional or spec	cial informati	ion.	
* * * * * * * * * * * * * * * * * * * *			
			14002
		*	
•			

List general remarks, comments and/or recommendations below:

SAEEI NO.	COMMENTS	
		10000

	GANGET BY
	1980 - 77
Prepared By:	
Title:	
Section:	

VALUE ENGINEERING

_ Yes* _		
		4
	XI.	
		4 (47)

Appendix P

SPC Questionnaire

Spill Prevention and Control Plan (SPC) Questionnaire

Facility	v Information:
Facility	Name:
Address	3:
Facility	Operator:
Facility	Description (e.g. maintenance unit, storage yard, etc.):
	mark answers with an (X).) rations at your facility begin before August 16, 2002: YES NO
Informa	tion 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 d.
	 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.	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
	ъ
	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 $\underline{Nicholas.Larks@la.gov}$ by \underline{Monday} , $\underline{November~1}$, 2010.

Appendix Q

Project Delivery Manual Excerpts

On occasion, a permit will be issued for a section of highway for which an improvement project is planned. In such cases, the Project Manager should be consulted and kept fully informed to ensure proper coordination. The process for documenting the addition of utilities within state highway right-of-way is illustrated in figure 10.2. Reference is made to EDSM Number IV.2.1.3: "Policy for District Issuance of Right-of-Way Permits and Requiring Guarantee Deposit."

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 District Maintenance 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.

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."

9/1/2005

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Chapter 10: Stage 6 Standard Operation Procedure

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10-2

10.3 Responsibility Matrix

	OPERATIONS AND PERFORMANCE		
	ONSIBILITY MATRIX		
FUNCTION	RESPONSIBLE		
Disposal of excess right-of-way	District Maintenance Section, District Design Section, Real Estate Section		
Documentation of additional utilities permitted on the right-of-way	District Utilities Unit		
Compliance with post-construction environmental commitments	District Maintenance Section, District Traffic Engineering Section, Environmental Section (depends on nature of commitment)		
Materials durability and performance monitoring	District Maintenance Section, District Traffic Engineering Section		
dentification of design features that complicate maintenance activities	District Maintenance Section		
. dentification of design features that impede fficient traffic operations	District Traffic Engineering Section		

Appendix S

LSWA Conference Agenda

MASIEASSOCIATION

Louisiana Environmental Conference

ENVIRONMENTAL PARTNERSHIP OF BUSINESS INDUSTRY AND GOVERNMENT

MARCH 15-17 2017

WE ARE IDUSANA STRONG

CAJUNDOME CONVENTION CENTER LAFAYETTE, LA

> "Working to preserve Louisiana's environmental paradise"

Wednesday, March 15, 2017		
9:30 AM	Solid Waste Operator Certification Test (Cajundome Convention Center)	
2:00-5:30 PM	Exhibitor Set-Up and Early Registration (Pre-Registered Attendees)	
6:00-9:00 PM	Hospitality Room (Hilton Garden Inn) BEACH PARTY THEME	

		Thursda	y, March 16, 2	017		
7:30-8:30	Registration & Exhibitor Visitation					
8:30-9:30	Dr. Chuck Brown, DEQ Secretary					
9:30-10:00	Tom Harris, DNR Secretary					
10:00-11:00	Ethics Training-Kim Chatelain, Jefferson Parish Office of Inspector General					
11:00-11:30	Exhibitor Visitation					
11:30-1:00	Carl Edlund, EPA Region 6 Representative-Update on Region 6 Activities & Awards Presentation					
		Breakou	it Sessions			
Track Titles	Solid Waste (Blues Room)	Industrial/Energy (Cajun Room)	UST (Jazz Room)	Water/Waste Water (Zydeco Room)	LEHA (Gospel Room)	
1:00-1:30	The Use of Drones at Landfills-Raymond Crews	Federal Regulatory Update-John King	Pay for Performance- Durwood Franklin, LDEQ	Drinking Water Program/Rule Updates LDHH Representative	Cancer in Louisian	
1:30-2:00	Waste Permits Divis i Silva,		Trust Fund Update- Jeff Baker, LDEQ	Drinking Water Quality in New Orleans-Cedric Grant, Executive Director, Sewage & Water Board, New Orleans	Facts & Fables-Rao Ratard	
2:00-3:00			Exhibitor Visitation		Bar 18	
3:00-3:30	Certification of Compliance Update- Mike Hahn, LDEQ	EPA Online- Interactive Mapping- Steve Thompson	Regulatory Complicance for USTS from A-Z-Todd Perry, PPM	DEQ NPDES Rule and	Are These Crawfist Safe To Eat? A Stud of Bioaccumulation Helen Connelly	
3:30-4:00	Landfill Heavy Equipment Marc Taylor, Caterpillar	EPA Enforcement Issues-Steve Gilrein	Changes to the UST Abandoned Tank Closure & Assessment Program Vicky Hadwin	316 (b) Update Bruce Fielding, LDEQ Sa Su	Safety of Dietary Supplements-Lance Fontenot	

6:00 - 9:00 pm	Haspitality Event Asadian Village	518 A. S. 7 -
6.00 - 3.00 pm	Hospitality Event-Acadian Village	

The LDEQ Satellite Office - LDEQ Staff will have an "Office" established in the Lobby of the Cajundome Convention Center from 10:00am to 12:00pm and 1:00pm to 3:00pm on Thursday and from 8:30am to 11:30am on Friday. Stop by the "Office" and have questions answered regarding geology, engineering, permitting, and other topics.

Friday, March 17, 2017

Track Titles	Solid Waste (Gospel Room)	Industrial/Energy (Cajun Room)	UST (Jazz Room)	Water/Waste Water (Zydeco Room)	LEHA (St. Landry Room)
7:30-8:00			EXHIBITOR VISITATION	N .	
8:00-8:30	Household Hazardous Waste Management- Don Caffery, LDEQ	LDEQ Stack Test Protocol & Report Reviews: What is Expected and Accepted-Jason Meyers, LDEQ	UST Enforcement/ Expedited Penalty Agreement-Roselle Foote, LDEQ	Biosolids Rule Update and Oxidation Pond Closures Todd Franklin, LDEQ	Mimic the Natural System to Yield Higher Ecosystem
8:30-9:00	Closure & Post Closure Requirements-An Update-Martin Perilloux, LDEQ	The Advance Program & How it Works in the Community-Vivian Aucoin	Professional Ethics for Geosciences &	Biochemical WW Treatment- Larry Shriver	Services-Scott Courtright
9:00-9:30	Emergency Debris Sites Karla Vidrine & Dutch Donlon, LDEQ	Emission Reduction Credits for Mobile Sources (AQ 365)- Bryan Johnston	Engineers-Bill Schramm, LDEQ	Keep Louisiana Beautiful/Litter Management Panel-Susan Russell, Keep LA Beautiful;	Innovative Remediation Technologies-Dave Wandor
9:30-10:00	Groundwater Monitoring at Landfills-Jon Fourrier, Fourrier & de 'Abreu Engineers, LLC	SO2 Data Requirements Rule Update: Monitor Installation & Operation-K. Calhoun, Providence	Vapor Barriers -Keith Horn, LDEQ	Donna Curtis, Shreveport Green; Richard E. Moore Sr., St. Tammany Parish Government	Mosquito Control & Honey Bees- Minimizing Pollinator Mortality-Randy Vaith
10:00-10:30		ı	XHIBITOR VISITATIO	N	
10:30-11:00	Landfill Cell Design & Construction 101-Dr. Ricardo de 'Abreu, Fourrier & de' Abreu Engineers, LLC	Updates Regarding the Louisiana Water Code Mark Davis, Tulane University Law School	LDEQ Roundtable- Issac Ricketts & Angelle Duplechain, LDEQ	Watershed Modeling for Sewer Prioritization and Planning Aimee' Killeen, Providence Engineering	Mold Mitagation
11:00-11:30	Groundwater Assessment Monitoring, Lessons Learned-Steven Forester, LDEQ	Re-definition of Solid Waste-Update- Nora Lane & Don Caffrey	UST Regulatory Update-Sam Broussard, LDEQ	Watershed-Flood Modeling Paul Carroll	Creative Ways for Spent Bauxite Solid Waste Management Zia Tammami
11:30-12:00	Odor Control/Gas Management-Elliot Donato, St Landry Parish	Recent Fee Increases Karen Andrews, LDEQ		Resiliency Planning Panel: Siobhan Foley, Mayor's	
12:00-12:30	Landfill Safety-Tony Franco, Waste Management		RECAP Update-Dana Shepherd, LDEQ	Office of Resilience and Sustainability, City of New Orleans	
12:30			Allo Synthesis Es		

Appendix T

Master SWPPP Template



STORM

WATER

POLLUTION

PREVENTION

PLAN

Storm Water Pollution Prevention Plan (SWPPP)

Permit Number: LAR 600000
Prepared For:
Project Name & Location:
Prepared by:
Date:

This Storm Water Pollution Prevention Plan (SWPPP) is provided by the Louisiana Department of Environmental Quality (LDEQ) Business and Community Outreach/Small Business Assistance Division (BCO/SBA). LDEQ BCO/SBA technical services are provided courtesy of LDEQ. Providing this document does not certify that the information is complete or complies with all requirements. The BCO/SBA claims no responsibility for omissions or inaccuracies in values or information presented to the LDEQ Administrative Authority by businesses seeking compliance with state environmental regulations. The LDEQ Administrative Authority alone determines when compliance is achieved; and, businesses are ultimately responsible for satisfying all requirements of such Authority

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
	by Construction Site Operator ay Operational Control)
certify under penalty of law that this d y direction or supervision in accordan	document and all attachments were prepared unde
ersonnel properly gather and evaluate the person or persons who manage to r gathering the information, the inform and belief, true, accurate, and complete r attesting to false information, including	the information submitted. Based on my inquiry the system, or those persons directly responsible nation submitted is, to the best of my knowledge e. I am aware that there are significant penalties ing the possibility of fine and imprisonment for
ersonnel properly gather and evaluate the person or persons who manage to r gathering the information, the inform and belief, true, accurate, and complete	the information submitted. Based on my inquiry the system, or those persons directly responsible nation submitted is, to the best of my knowledge e. I am aware that there are significant penalties

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
	200	

CONTENTS

1.0		CONTACT INFORMATION					
2.0	OB	OBJECTIVE					
3.0	NON-STORM WATER DISCHARGES						
4.0	SW	P3 REVIEW AND AMENDMENTS					
	4.1	Review					
	4.2	Amendments					
5.0	SIT	E OR PROJECT DESCRIPTION					
	5.1	Description of Construction Activity & Environmental Impact					
	5.2	Construction Activity with Potential Pollutant Sources					
	5.3	Major Activities Schedule					
	5.4	Property Acreage					
	5.5	Construction Activity Acreage					
	5.6	Soil Data					
	5.7	General Location Map and Site Map					
	5.8	Erosion and Sediment Control Site Map					
	5.9	Industrial Discharges					
	5.10						
	5.11	LPDES Construction General Permit,					
		LAR600000					
	5.12	Threatened and/or Endangered Species					
	5.13	Historical Determination					
	5.14	Total Maximum Daily Loading (TMDL)					
6.0	ERO	SION AND SEDIMENT CONTROLS					
	6.1	Short & Long Term Goals/Criteria					
	6.2	Best Practicable Technology (BPT)					
	6.3	Site-specific Erosion and Sediment Controls					
7.0	STAI	BILIZATION PRACTICES					
	7.1	Deadline to Initiate Stabilization Measures					
	7.2	Deadline to Complete Installation of Stabilization Measures					
	7.3	Other Deadlines					
	7.4	Stabilization Records					
8.0		JCTURAL CONTROLS					
	8.1	Structural Control Requirements					
	8.2	Site Structural Controls					
9.0	STOF	RM WATER MANAGEMENT					
10.0	OTHE	ER CONTROLS					
	10.1						
	10.2	Other Controls at the Site					

- 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