



Stormwater Construction General Permits

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Presentation Acronyms

- LDEQ – Louisiana Department of Environmental Quality
- SB/SCAP – Small Business & Small Community Assistance Program
- NPDES – National Pollutant Discharge Elimination System
- NOI – Notice of Intent



Presentation Acronyms

- LPDES - Louisiana Pollutant Discharge Elimination System
- SWPPP – Stormwater Pollution Prevention Plans
- BMPs – Best Management Practices
- MS4s – Municipal Separate Storm Sewer Programs



Agenda

- LDEQ and SB/SCAP Overview
- Clean Water Act
- NPDES/LPDES Program
- Stormwater Permits
- Stormwater Pollution Prevention Plans
- BMPs and Other Issues



LDEQ & SB/SCAP OVERVIEW



DEQ in 2010 Organizational Structure

OFFICE OF THE SECRETARY

LEGAL AFFAIRS &
REGULATION
DEVELOPMENT

COMMUNICATIONS

BUSINESS &
COMMUNITY
OUTREACH

CRIMINAL
INVESTIGATIONS

OMBUDSMAN

ENVIRONMENTAL SERVICES

WATER PERMITS

WASTE PERMITS

AIR PERMITS

PERMITS SUPPORT
SERVICES

REMEDIAION
SERVICES

UNDERGROUND
STORAGE TANKS

ENVIRONMENTAL COMPLIANCE

SURVEILLANCE

ENFORCEMENT

EMERGENCY RESPONSE
& RADIOLOGICAL
SERVICES

WATER QUALITY
ASSESSMENT

AIR QUALITY
ASSESSMENT

MANAGEMENT & FINANCE

FINANCIAL
SERVICES

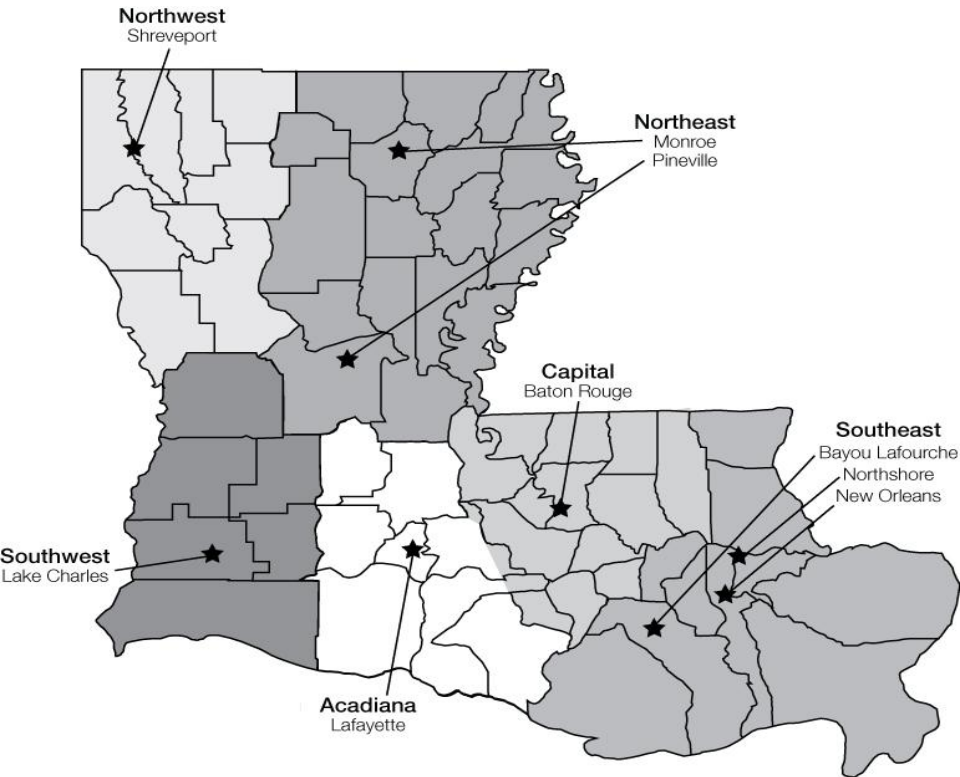
INFORMATION
SERVICES

HUMAN RESOURCES



SB/SCAP in 2010

Regional Office Map



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Water Quality in Louisiana





CLEAN WATER ACT

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Clean Water Act

- Passed in 1972 to restore and maintain the quality of the nation's waterways
- The ultimate goal is to make sure that the rivers and streams are fishable, swimmable, and drinkable
- Provisions to govern stormwater discharges from construction activities were added in 1987



NPDES & LPDES PROGRAMS



National Pollutant Discharge Elimination System (NPDES)

- Under the Clean Water Act, the NPDES permit program controls water pollution by regulating sources of pollution that discharge into waters of the United States
- NPDES permits are issued through the U.S. Environmental Protection Agency (EPA) or a delegated state



Louisiana Pollutant Discharge Elimination System (LPDES)

- In August of 1996, the state of Louisiana was delegated the NPDES program from EPA
- LDEQ is now responsible for issuing all water discharge permits in the state of Louisiana (except those retained by EPA)



STORMWATER PERMITS



Common Terms in the Stormwater Program

- *Land disturbance*
 - Clearing
 - Grading
 - Excavation





Common Terms in the Stormwater Program

- Operator – An operator is someone who has control over and the ability to modify construction plans and specifications (such as the owner, developer and/or general contractor) or someone who has control over the day-to-day operations at the site that are necessary to ensure compliance with the permit requirements



Common Terms in the Stormwater Program

- Best Management Practices (BMPs) – a BMP is a method used to prevent or control storm water runoff and the discharge of pollutants, including sediment, into local waterbodies. Silt fences, inlet protection, and site-stabilization techniques, are typical BMPs on a construction site.



Stormwater Permits

- The LPDES stormwater permit program requires operators of construction projects to obtain authorization to discharge stormwater under an LPDES construction stormwater permit
- Since 1990, any project 5 acres or greater has been covered
- Since March 2003, any project from 1 acre to less than 5 acres is also covered



Goals of the Construction Stormwater Program

- Prevent or minimize impact of construction
 - Deterioration of the receiving stream's water quality (TSS, Oil and Grease, pH, floatables, etc.)
 - Sediment and debris in roadways and local stormwater drainage systems
 - Minimize erosion during construction
 - Violations of LPDES and local stormwater regulations



Goals of the Construction Stormwater Program

- Consider post-construction stormwater management
 - Decrease the volume of rainfall that runs off a site
 - Decrease the speed or rate at which runoff flows off the site
 - Decrease the amount of pollutants carried off a site by runoff



Regulated Storm Water Discharges from Construction Activities

- Clearing, Grading, and Excavation Activities
- Land Disturbance of Between One (1) and Five (5) Acres
- Land Disturbance of Five (5) or More Acres of Total Land Area - Including Areas that are Part of a “Larger Common Plan of Development or Sale”



Exempt Stormwater Activities

- Clearing of land solely for agricultural purposes
- Projects on cultivated croplands
- Repaving of roads and reworking of utility lines or pipelines unless one or more acres of underlying and/or surrounding soil are cleared, graded or excavated as part of the operation



LPDES Permit Program for Stormwater

**Does not override
more stringent
local requirements.**



Can being located within a MS4 Impact Construction Activity?

YES!!

- **Municipal Separate Storm Sewer Systems (MS4s):**
 - have requirements for controlling construction storm water discharges
 - have requirements for development and redevelopment
 - have requirements for public involvement and participation in MS4 Stormwater Management Program
 - may require more stringent actions for controlling stormwater and may even require the use of certain BMPs



Who Needs a Permit? Operators

Any party associated with the construction project that meets the following conditions:

- The party has operational control over project specifications (including the ability to make modifications in specifications),
or
- The party has day-to-day operational control of those activities at a project site which are necessary to ensure compliance with the SWPPP or other permit conditions (e. g., they are authorized to direct workers at the site to carry out activities identified in the storm water pollution prevention plan or comply with other permit conditions).



Construction General Permits

1. LAR100000 – Large Construction Sites
2. LAR200000 – Small Construction Sites





LAR100000 - Large Construction

- Construction Activities 5 acres or more **and smaller sites if part of a larger common plan of development**
- Also authorizes discharges from support activities related to a construction site (concrete or asphalt batch plants, equipment staging yards, material storage areas, etc.)



LAR100000 – Large Construction

- Requires development of a SWPPP
- Submittal of NOI at least 48 hrs prior to commencement of construction/ground disturbing activities
- Application made by party having operational control over construction plans and specs and/or party having day-to-day operational control over activities on site



LAR200000 – Small Construction

- Activities greater than one acre, but less than five acres
- No NOI required - automatically covered
- Requires Development of a SWPPP
- When project is complete and the site has been stabilized, the permittee submits a Completion Report to Permits and the Regional Office



Stormwater Permit Process

- Determine which permit you need
- Obtain a copy of the permit
- Read and understand the permit requirements
- Develop a Pollution Prevention Plan
- Apply for coverage/submit an NOI
- Implement the Pollution Prevention Plan
- Final stabilization
- Terminate coverage under the permit when completed



Obtaining a Copy of the Permit

- You can download a copy of LAR100000 (Large Construction Permit) at:
<http://www.deq.louisiana.gov/portal/Portals/0/permits/LAR100000.pdf>
- You can download a copy of LAR200000 (Small Construction Permit) at:
<http://www.deq.louisiana.gov/portal/Portals/0/permits/LAR200000.pdf>



Obtaining a Copy of the Permit

- www.deq.la.gov
 - Tabs on top of page
 - Divisions
 - Water Permits
 - LPDES Permits
 - Scroll down: LPDES General Permits
 - Scroll down: LAR100000 (application on same page, CSW-G) or LAR200000



SWPPPs, Tips, and Common Problems



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Construction SWPPPs – What Should be in the Plan

- Site Description
 - Description of the nature of the construction activity
 - Description of the sequence of major activities
 - Estimates of the total area of the site, and the total area to be disturbed
 - Estimate of the runoff coefficient for both pre- and post-construction
 - General location map
 - Location and description of any discharge associated with industrial activity other than construction
 - Name of the receiving waters
 - Copy of the permit requirements
 - Endangered Species & Historic Preservation Statements



Construction SWPPPs – What Should be in the Plan

- Controls
 - Erosion and Sediment Controls
 - Stormwater Management Controls
 - Other Controls
- Maintenance
- **Inspections!!!!!!!**



Construction SWPPPs – What Should be in the Plan

- Non-Stormwater Discharges
- Contractor and Subcontractor Responsibilities
- Templates are available through LDEQ SB/SCAP personnel or on the EPA website



Soil Erosion Control Tips

- Design the site to infiltrate stormwater into the ground and to keep it out of storm drains.
- Minimize the amount of exposed soil on site.
- Reduce the velocity of stormwater both onto and away from the project area.
- Protect defined channels immediately with measures adequate to handle the storm flows expected.
- Keep sediment on site.
- Maintaining all BMPs is critical to ensure their effectiveness during the life of the project.



Other Tips

- Keep potential sources of pollution out of the rain as practicable.
- Clearly identify a protected, lined area for concrete truck washouts.
- Park, refuel, and maintain vehicles and equipment in one area of the site to minimize the area exposed to possible spills and fuel storage.
- Practice good housekeeping.
- Never hose down paved surfaces to clean dust, debris, or trash.
- Dispose of hazardous materials properly.



Common Compliance Problems at Construction Sites

- Not all “operators” have submitted NOIs
- Project does not have stormwater permit coverage, SWPPP and proper BMPs
- Have an “erosion control plan” on the engineering design map but not a SWPPP
- Operators have not posted their permit notice of coverage at the entrance



Common Compliance Problems at Construction Sites (cont.)

- Have failed to conduct and document required inspections - are part of the SWPPP
- Have prepared an inadequate SWPPP
- There are no narrative descriptions
- Have failed to install or maintain proper BMPs
 - BMPs wrong type or location for the site
- SWPPP is not updated to reflect changes in BMPs or site conditions

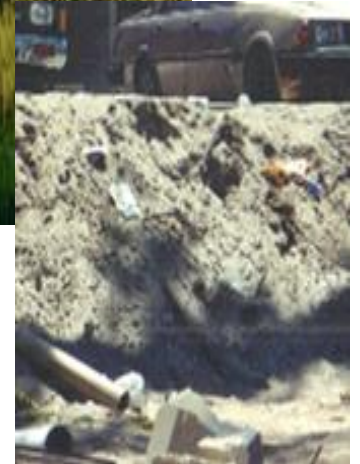
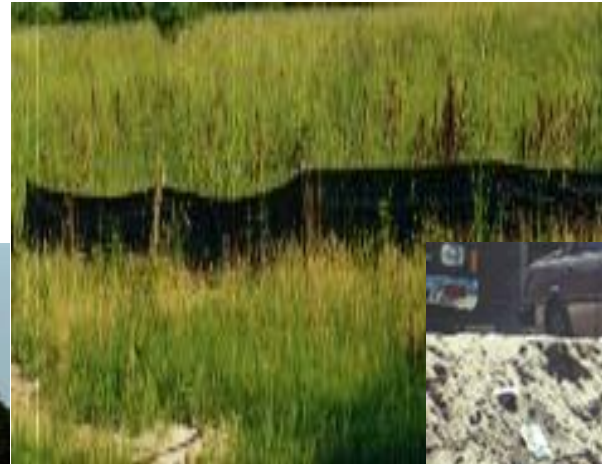


Common BMPs for Erosion and Sediment Control and General Housekeeping



Controls to Reduce “Runoff”

- stabilized construction entrances, curbing, silt fences, and sediment traps



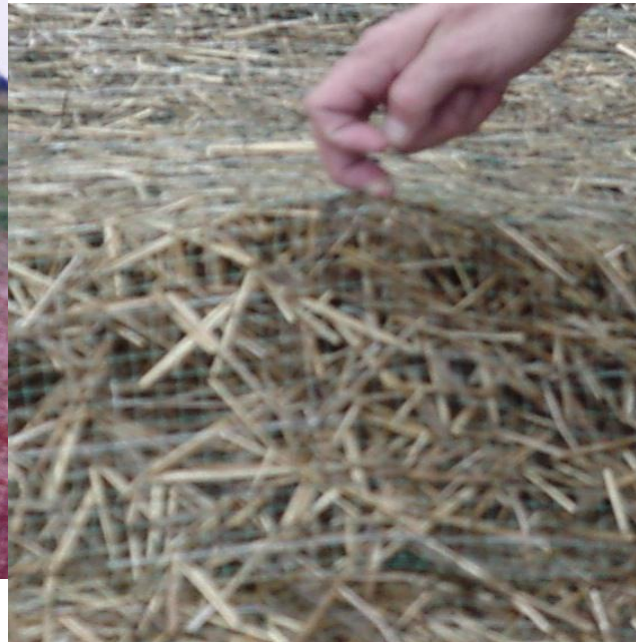


Structural Controls





Mulch, Grass, Mesh Screens, and Hay Bales





Recycle - Reuse

- Recycling and reuse programs designed by developers and construction operators.





Common Best Management Practices

Good Housekeeping
Preserving Natural Vegetation
Minimizing Disturbance



Good Housekeeping



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Minimizing Disturbance

- Scraping, clearing, grading only that area which will be actually constructed on.
- Causes less harm to environment.





Preserving Natural Vegetation





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A not so well constructed silt fence.





Another not so well constructed silt fence.





Proper storage of construction waste...



Building waste should be stored in designated area and in a manner that will prevent it moving off site by either wind or water.



Not good use of a debris roll-off box.



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Not a good way to keep your construction debris...



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How not to keep construction debris on your site...



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Stabilized Construction Entrances



Stabilized construction entrances allow dirt to be removed from tire treads and collected as trucks leave construction sites



Not a good construction entrance...





Decent construction entrance...





Good use of sod



Correct use of erosion and sediment controls means that sediment does not enter the stormwater system.



Inlet Protection



Coarse gravel and cinder blocks are often used to keep sediment and other pollutants out of storm drains



Inlet Protection





When is the BEST time to do stormwater inspections?





Resources

- EPA Guidance for SWPPP
<http://cfpub.epa.gov/npdes/stormwater/swppp.cfm>
- LDEQ Water Permits
<http://www.deq.louisiana.gov/portal/Default.aspx?tabid=243>
- EPA Stormwater Program for Construction Activities
<http://cfpub.epa.gov/npdes/stormwater/const.cfm>



Resources

- 9.27.10 Stormwater Presentation

<http://www.deq.louisiana.gov/portal/PROGRAMS/CommunityIndustryRelations/ENVIROLibrary.aspx>



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