

Construction Storm Water

Regulations, LPDES Permits, and SWPPP Requirements

Spring 2015



Why do we have Storm Water Permits for Construction Activity?



- Clean
 Water Act
- Code of Federal Regulations (40 CFR 122.26)
- State
 Regulations
 §2511











Pollutants Commonly Discharged from Construction Sites



- Sediment (eroded or tracked soil)
- Solid and sanitary wastes
- Phosphorus (fertilizer)
- Nitrogen (fertilizer)
- Pesticides (insecticides, herbicides)
- Oil and grease
- Concrete truck washout
- Construction chemicals and debris



-from EPA Stormwater Fact Sheet 833-F-00-008









LOUISIANA







Mayfly larva—note the feathery gills









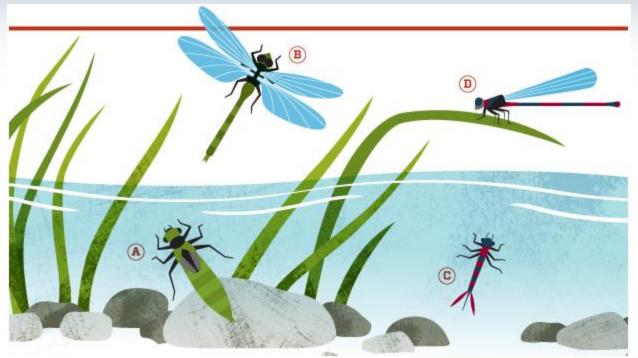














Dragonflies and Damselflies









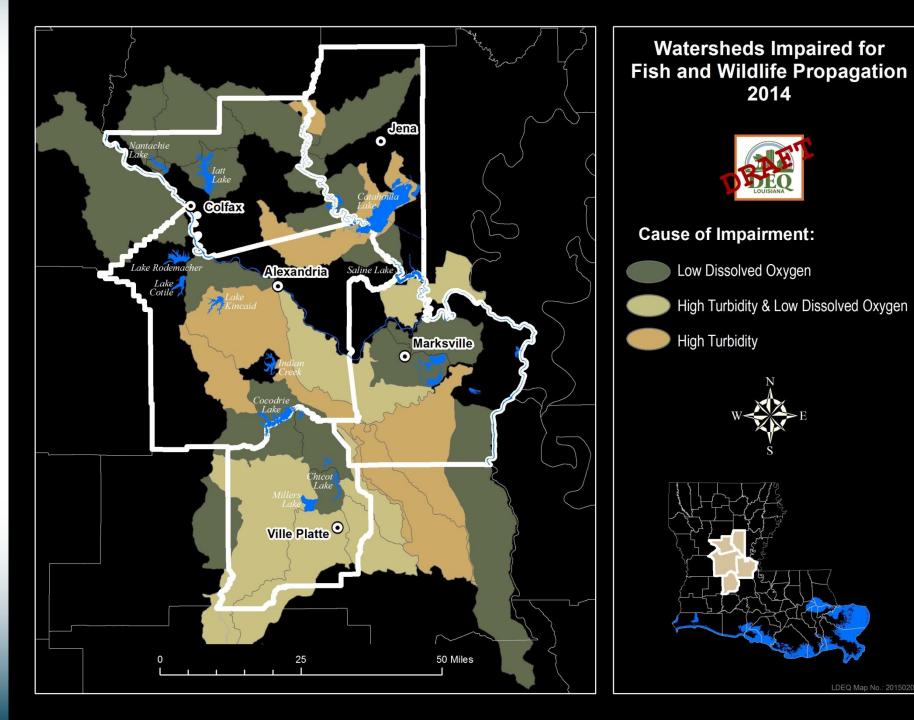
Damselfly adult and nymphs







Turbid water flowing from culvert



Water Quality Impairments



Louisiana's Final 2012 Integrated Report:

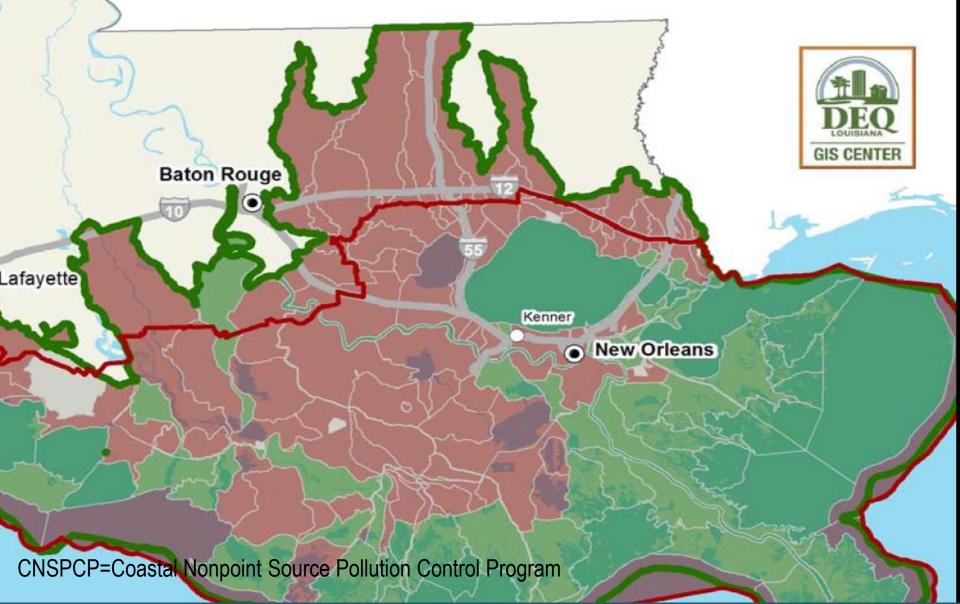
- 19 water bodies impaired due to drainage/filling/loss of wetlands
- 15 water bodies impaired due to site clearance (land development and redevelopment)
 - Many of these are in the Lake Pontchartrain Basin (Tchefuncte River, Tangipahoa River, Bayou Liberty, Bayou Bonfouca, Bayou Lacombe, etc.) Closest to central LA is Bundicks Lake, impaired by turbidity for fish and wildlife reproduction due to site clearance.

Louisiana's Final Draft 2014 Integrated Report available at:

http://www.deq.louisiana.gov/portal/DIVISIONS/WaterPermits/W aterQualityAssessment/WaterQualityInventorySection305b.aspx



Louisiana DEQ CNSPCP Basin Subsegments Impaired for Fish and Wildlife Propagation





Clean Water Act

§ 402(p) <u>Municipal</u> and <u>Industrial</u> Stormwater Discharges

(3)Permit Requirements –

(A) Industrial Discharges. – Permits for discharges associated with industrial activity shall meet all applicable provisions of this section and section 1311 of this title

§ 1311 is Effluent Limitations



40 CFR/LAC 33



40 CFR 122.26(a)(1)(ii) and LAC 33:IX.2511.B.14.j state:

Industrial activity includes Construction activity including clearing, grading, and excavation, except operations that result in the disturbance of less than five acres of total land area. <u>Construction activity also</u> <u>includes the disturbance of less than five acres of total</u> <u>land area that is a part of a larger common plan of</u> <u>development or sale if the larger common plan will</u> <u>ultimately disturb five acres or more.</u>



40 CFR/LAC 33



- 40 CFR 122.26(a)(15) and LAC 33:IX.2511.B.15 include permit requirements for small construction activities (> 1 < 5 acres)
- Some waivers from coverage are allowed if project meets the low erosivity factor requirement (for detailed information on the Construction Rainfall Erosivity Waiver, see EPA Fact Sheet 3.1 here: http://www.epa.gov/npdes/pubs/fact3-1.pdf)



CWA and 40 CFR



- § 402(p) of the Clean Water Act also requires permits for large and medium municipal separate storm sewer systems (MS4s) – Specific permit requirements are found in 40 CFR 122.26
 - commonly called PHASE I
- 40 CFR 122.30-37 was finalized on December 8, 1999 and required permits for small MS4s within the US Census Urbanized Area
 - commonly called PHASE II





MS4 Relationship to LPDES Permits

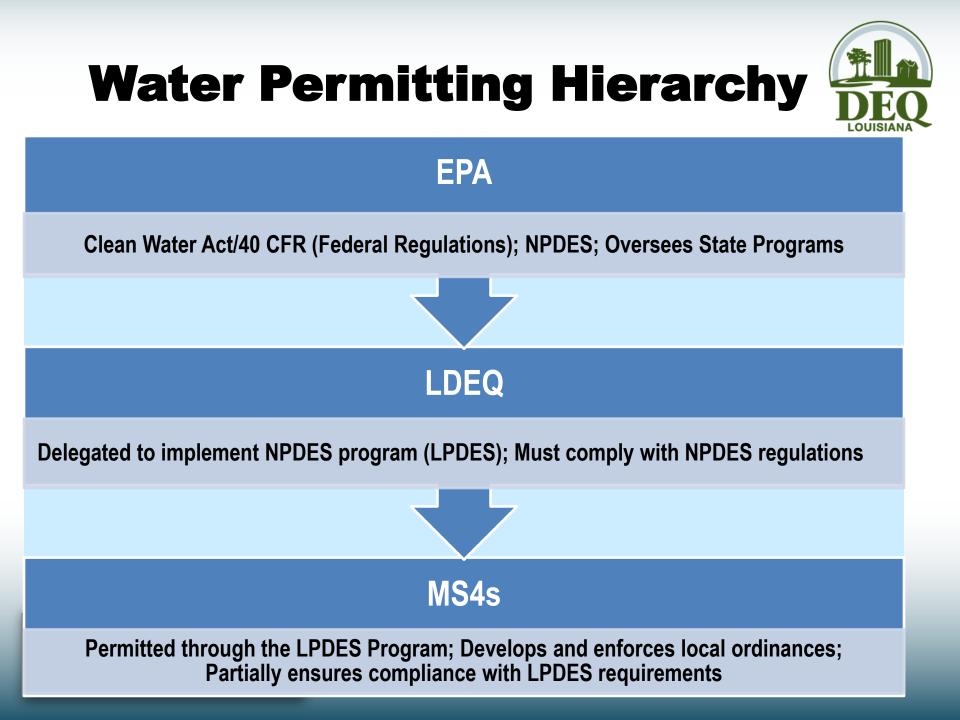


11,000+ Facilities and Construction Storm Water Projects covered under LPDES (Louisiana Pollution Discharge Elimination Program) Master General Permits

- Illicit Discharge Detection and Elimination (IDDE):
- Construction and Post-Construction Storm Water Management

These are major components of MS4 SWMPs (storm water management plans)

Permitted MS4s are partially responsible for ensuring facilities and projects within their jurisdiction have obtained the appropriate LPDES permits and are discharging in compliance with those permits



Regulatory Inspections



- Construction sites may be inspected by 3 entities: EPA, LDEQ, and the MS4
- The Construction General Permit requires a site operator to allow regulators to inspect the site
- Many inspections are complaint-driven
- Fines and penalties escalate: MS4 < LDEQ < EPA
- EPA can refer the worst cases to the Dept. of Justice



Regulatory Inspections–MS4



- Required to conduct inspections of construction activities within jurisdiction as laid out in its Stormwater Management Plan and LDEQ permit; for example, inspecting to enforce its local ordinances; inspecting against the SWPPP and the Erosion and Sediment Control Plans approved by the MS4
- MS4 can perform inspections and enforcements within its jurisdiction as defined by 2010 census
- May receive and respond to complaints from the EPA, LDEQ, and citizens
- Can issue a stop-work order, costing time and money
- May refer site to LDEQ or EPA



Regulatory Inspections-LDEQ



- Will inspect against and enforce the SWPPP, local ordinances or regulations, and the state permit
- Inspections are unannounced. It is a violation of the permit to keep inspector waiting over 30 minutes after presentation of credentials
- LDEQ leaves a copy of the inspection report showing areas of concern
- Will ask to see the SWPPP and documentation of self-inspection
- Will look at site map and conduct walk-about inspection of the site
- Generally responds to complaints made by a citizen, MS4, or EPA



Regulatory Inspections-EPA



- Will inspect against and enforce the SWPPP, the state permit, and sometimes local ordinances
- Inspections are unannounced
- Reasons for inspections vary–could be part of a national initiative, response to a complaint, or to evaluate effectiveness of MS4 program
- Will ask to see the SWPPP and documentation of selfinspection
- Will review prior inspection reports
- Will look at site map and conduct walk-about inspection of the site, looking at BMPs





STORM WATER GENERAL PERMITS FOR CONSTRUCTION ACTIVITIES



General Permits

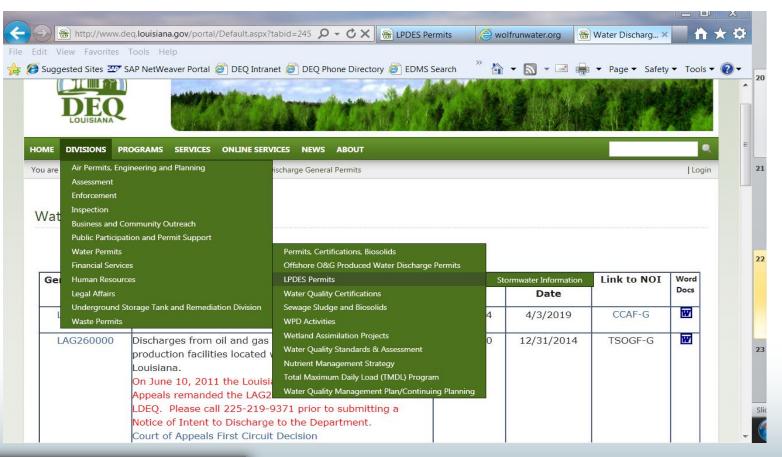


- 40 CFR 122.28 allows the permitting authority to issue a general permit to regulate one or more categories or subcategories of discharges
- The Notice of Intent (NOI) must include information <u>necessary for adequate program</u> <u>implementation</u>, at a minimum:
 - Legal name and address of owner/operator, facility name and address, type of discharges, and receiving streams



New Permit and NOI Documents are on:

http://www.deq.louisiana.gov/portal/Default.aspx?tabid=2 45.







Frequently Asked Questions:

http://www.deq.louisiana.gov/portal/tabid/2661/Default.aspx





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Frequently Asked Questions

LPDES FAQs

Below are answers to Frequently Asked Questions concerning the LPDES program. If you can not find the question/answer you are looking for, please contact the LDEQ Customer Assistance Center at 225-219-LDEQ (5337) or Toll Free 1-866-896-LDEQ (5337).

Where can I get a copy of my LPDES Permit? If your LPDES permit or general permit coverage was issued on or after July 1, 2005, a copy of your permit can be obtained free of charge from LDEQ's online Electronic Document Management System (EDMS) utilizing your Agency Interest (AI) Number. If your permit was issued prior to July 1, 2005, a copy can be obtained by contacting the Public Records Center at phone (225) 219-3168 or e-mail publicrecords@la.gov, from 8:00 a.m. to 4:30 p.m. Monday through Friday.

How can I access the records LDEQ has on file for my facility? All records filed on or after July 1, 2005 are available online through LDEQ's Electronic Document Management System (EDMS). Utilizing your Agency Interest (AI) Number you can review all files LDEQ has on file for your facility from July 1, 2005 on. If you do not know or have available your AI Number, you can search for it utilizing the *Look Up AI* Function in EDMS. Documents filed prior to July 1, 2005 are available for review at all LDEQ Public Records Centers throughout the state (located within the LDEQ Regional Offices).

How do I determine if a discharge from my facility is eligible for coverage under an LPDES General Permit? Part I, Section A - Applicability, of a general permit will define what types of discharges are covered by that particular general permit. Copies of all general permits are available for review on the LPDES Water Permits Division web page.

Login

GENERAL PERMITS Storm Water General Permits (4 types)



- Storm Water Associated with Industrial Activity (Multi-Sector General Permit)
- Construction 5 acres or greater
- Construction < 5 acres
- Municipal Separate Storm Sewer System (MS4)

Requires Storm Water Pollution Prevention Plan (SWPPP) – includes Best Management Practices (BMPs) and activities to reduce and/or eliminate the discharge of pollutants in storm water. SWPPPs are site-specific and based on the unique characteristics of each construction site.



Acronyms/Definitions



- **BMP** Best Management Practice (i.e. good housekeeping, silt fences, catch basins, etc.)
- **Common Plan of Development** contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one plan (i.e. subdivisions, office parks, retail developments)
- **NOI** Notice of Intent to discharge (application)
- **SWPPP** Storm Water Pollution Prevention Plan
- **NOT** Notice of Termination (end of discharge)





<u>Before</u> beginning any construction activity where one or more acres of land will be disturbed OR less than one acre that is part of a common plan of development, a Storm Water Pollution Prevention Plan must be developed and available on site.





General Permits Authorization Letter



- A copy of the Master General Permit will NOT be sent with the permit authorization. The cover letter will include a link and/or an EDMS Document Number to the general permit.
- The permit authorization letter acknowledges receipt of the permit NOI and the Department's decision to authorize coverage under a general permit.



Important Information



- All NOIs received are scanned and are available in EDMS approximately one week after they are received by LDEQ (<u>http://www.deq.louisiana.gov/portal/tabid/2604/Default.aspx</u>).
- Generation of authorization letters may take 4-6 weeks, depending on volume.
- Construction GPs and MSGPs are self-implementing. Discharges are authorized 48 hours after the postmark date of a <u>correct</u> and <u>complete</u> NOI.
- The permit writer will attempt to contact the owner/operator ASAP via telephone or email if additional information is required.



Elements of a SWPPP



- Site Description nature of activity; maps with drainage patterns; sequence of activities; etc.
- Controls describe erosion and sediment controls; stabilization practices; structural controls
- Maintenance procedures
- Inspections Schedules and Self-Inspection documentation
- A SWPPP is a living document: Must be updated as necessary to address ineffective storm water controls



Site Inspections by Permittee



- Site inspection by permittee is required by the permit
- Inspections must be conducted at least every 7 days or every 14 days, before anticipated storm events, and within 24 hours of the end of a storm event of 0.5 inches or greater
- Important details are in Part IV of LAR100000 and Part III of LAR200000



Site Inspections by Permittee



Areas to be inspected include:

- Disturbed areas that have not been finally stabilized
- Areas used for storage of materials that are exposed to precipitation
- Structural and nonstructural control measures
- Locations where vehicles enter or exit the site

A report must be completed for each inspection and should be retained for at least 3 years after date of final stabilization.





Who needs Permit Coverage?

Operators and Responsible Parties



Operators and Responsible Parties



"Application for coverage shall be made by:

- (1) a party having operational control over construction plans and specifications; and/or
- (2) a party having day-to-day operational control over those activities at a project site which are necessary to ensure compliance with the SWPPP or other permit conditions.

When operational control over plans and specifications, and control over the day-to-day activities described above, are held by separate parties, each party shall submit an NOI. In cases with only one control party, that party alone is required to submit the NOI.

The entities who are considered operators will commonly consist of the owner or developer of a project (the party with control of project specifications) and the general contractor (the party with day-to-day operational control of the activities at the project site which are necessary to ensure compliance with the permit).

For subdivisions and commercial developments, an NOI shall be submitted by the owner/developer, the general contractor, and each individual builder within the subdivision or commercial development."



-from General Permit LAR100000, p. 15

SMALL CONSTRUCTION ACTIVITIES LAR20000



- Applicable to construction projects that will disturb at least one acre of land but less than five acres of land; and
- Construction projects that will disturb less than one acre of land but are part of a common plan of development >1 < 5 acres
- Water permits may be viewed here: http://www.deq.louisiana.gov/portal/Default.asp x?tabid=245



LAR200000...



- No Notice of Intent (NOI) required (automatically regulated); <u>no fees</u>
- Post a Notice near the main entrance of the construction site
- Storm Water Pollution Prevention Plan (SWPPP) Requirements are found in Part III of the permit
- SWPPP must be in writing, signed, certified and implemented when earth disturbing activities begin
- Certification statements for the SWPPP are found in Part V.G of the permit



Post a Notice



"The permittee shall post a notice near the main entrance of the construction site with the following information:

- a. the LPDES permit number for the project or a copy of the NOI if a permit authorization number has not yet been assigned;
- b. the name and telephone number of a local contact person;
- c. a brief description of the project; and
- d. the location of the SWPPP if the site is inactive or does not have an on-site location to store the plan."



-from permits LAR100000, p. 29 and LAR200000, p. 16



Scenario 1



A small neighborhood of 15 homes is being developed. The total area of land disturbance will be 3.75 acres. *Does the developer/landowner need to submit an NOI to LDEQ?*

NO. The LAR20 is self-implementing. He/She must download the LAR20, develop a SWPPP, and follow the requirements.









The developer decides to sell 3 lots to another contractor who will be building custom homes for his clients. *Does the <u>contractor</u> also need to develop a SWPPP?*

Answer: Yes. The contractor may develop his own SWPPP for all three houses or the contractor may share the developer's SWPPP, assuming the developer's SWPPP is sufficient for all homes in the subdivision.









The City of Alexandria decides to resurface a portion of a road. The total area of disturbance is 500 ft. by 30 ft. *Do they need to develop a SWPPP in accordance with the LAR200000?* NO. The total area is less than one acre (.334). The City may proceed with resurfacing the road.



CONSTRUCTION ACTIVITIES FIVE (5) ACRES OR MORE LAR100000



- Applicable to construction projects that will disturb five or more acres of land; and
- Construction projects that will disturb less than five acres of land but are part of a common plan of development that will disturb five or more acres of land.



LAR100000....



- Authorized to discharge after submitting a <u>complete</u> and <u>accurate</u> NOI form with the annual fee(s):
 - 48 hours after mailing the form to LDEQ; or
 - Upon receipt of a hand-delivered NOI to the LDEQ Galvez Building

Important: If one or more entities (persons, contractors, developers, etc.) will have operational control, EACH must submit an NOI.



LAR100000...



- Submit NOI form CSW-G with payment of annual fee(s)
 - Available on the LDEQ website at:

http://www.deq.louisiana.gov/portal/DIVISIONS/WaterPer mits/PermitsCertificationsBiosolids.aspx

> LPDES Permits > LPDES Water Permit Applications
Forms > Stormwater Permit Notices of Intent > CSW-G

- Post a Notice near the main entrance of the construction site (see p. 29 of permit for Notice requirements)
- Storm Water Pollution Prevention Plan (SWPPP) Requirements are found in Part IV of the permit
- SWPPP must be in writing, signed, certified, and implemented when earth disturbing activities begin



LAR100000...



- Certification statement found in Part VI.G.2.e of the permit
- SWPPP is a living document: It must be updated as necessary (see permit Part IV.C)
- Notice of Termination (NOT) form CSW-T
 - Available in Addendum D of the permit

Storm Water Guidance and SWPPP Templates available on the LDEQ website at: http://www.deq.louisiana.gov/portal/DIVISIONS/Water Permits/LPDESPermits/StormwaterInformation.aspx



LAR100000...



The annual maintenance and surveillance fee(s) must be submitted with the NOI in accordance with the following time frames:

- \$ 264.00 0 months 1 year
- \$ 528.00 2 years
- \$ 792.00 3 years
- \$1056.00 4 years
- \$1320.00 5 years

-Authorization letters will include the expiration date

–If a continuation of coverage under this permit is needed beyond the selected number of years, permittees must submit a **Notice of Extension** 30 days before the expiration date of the permit (Addendum C in permit)



LAR100000....



- NEW Notices of Intent (9-2014) MUST be used; older versions will not be accepted. Check the website; NOIs are updated periodically.
- No Notices of Termination are required
- Permit coverage will automatically end based on the number of years selected and the date the NOI is received
- Eliminates annual invoices based on fiscal year



Scenario 1



The city of Alexandria has hired a developer to build a new administrative complex. The City is in charge of the design, budget, and schedule. However, the contractor is in charge of implementing the project and addressing the dayto-day decisions on site. *Who needs to obtain the permit?*

BOTH have some operational control, therefore BOTH must file an NOI. The two entities may develop one SWPPP for the project.





Scenario 2



The contractor for Alexandria's new administrative project hires a subcontractor to install the sewer lines. The developer will oversee the installation. *Does the subcontractor need a permit?*

NO. The subcontractor does not have day-to-day operational control. The developer should include the sewer line installation in his/her SWPPP.









The city of Pineville is growing. A new mixed development is being proposed that includes condominiums, a retail mall, and a school. *Who needs a permit?*

The landowner/developer, the general contractor hired to build the condominiums, the contractors hired to build the retail mall, and the School Board.









An individual purchases a lot in an existing subdivision and intends to build a new home. The original plan of the subdivision included 20 acres of homes and park area. There are currently 12 empty lots left in the subdivision, totaling 6 acres. *Does the homeowner need to submit an NOI?*

YES. For established subdivisions if more than 5 acres of undeveloped lots remain, each new home built requires a permit authorization under LAR100000.



DEQ LOUISIANA

NONTRANSFERABLE LPDES GENERAL PERMITS (LAR)

- Louisiana Pollutant Discharge Elimination System (LPDES) <u>Storm Water General Permits</u> are nontransferable
 - LAR100000 (Large construction projects)
 - LAR200000 (Small construction projects)
 - LAR050000 (Multi-Sector General Permit for Storm Water Discharges Associated with Industrial Activities [MSGP])



What happens when a new project is sold in development?



- Current permittee must submit the correct Notice of Termination (NOT) form
- New owner/operator for LAR05 and LAR10 projects must submit the correct Notice of Intent (NOI) form



Resources



- <u>http://www.deq.louisiana.gov/portal/PROGRAMS/SmallBusinessSmall</u>
 <u>CommunityAssistanceSBSCAP.aspx</u> LDEQ's *Small Business Assistance Program* can help with NOIs, SWPPPs, etc.
- The Construction Industry Compliance Assistance Center (<u>http://www.cicacenter.org/</u>)
- EPA Storm Water Pollution Prevention Plan (SWPPP) Guide <u>www.epa.gov/npdes/pubs/sw_swppp_guide.pdf</u>
- EPA example SWPPP (< 5 acres commercial) <u>http://water.epa.gov/polwaste/npdes/stormwater/upload/exampleswpp</u> <u>p_smallcommercial.pdf</u>
- EPA example SWPPP (20 acre residential) <u>http://water.epa.gov/polwaste/npdes/stormwater/upload/exampleswpp</u> <u>p_residential.pdf</u>
- Louisiana Urban Stormwater Coalition (LUSC) <u>www.louisianastormwater.org</u>
- Stormwater BMP Guide for Jefferson and Orleans Parishes
 <u>http://bayoulandrcd.org/programs</u>



LDEQ Constr. Stormwater Helpful Documents and Links
 <u>http://www.deq.louisiana.gov/portal/DIVISIONS/WaterPermits/LP
 DESPermits/StormwaterInformation.aspx</u>



Construction Storm Water Effluent Guidelines



New Guidelines (40 CFR 450)



- Revised narrative guidelines effective March 6, 2014–were incorporated into LDEQ's small and large construction general permits
- All construction sites subject to permits must implement erosion & sediment controls and pollution prevention measures
- Turbidity limit for sites over 10/20 acres permanently removed—these were never part of LDEQ's permits



Non-Numeric (Narrative) Requirements



Limitation on discharges using these BMPs must reflect Best Practicable Technology (BPT).

- Erosion and Sediment Controls
- Soil Stabilization
- Pollution Prevention Measures
- Buffer Zones
- Prohibited Discharges
- Surface Outlets



Erosion and Sediment Controls



- Provide & maintain natural buffers around surface waters
- Direct storm water to vegetated areas, unless infeasible
- Minimize soil compaction and preserve topsoil, unless infeasible
- Minimize erosion at outlets, downstream channel and stream banks



Buffer Zones



New ELGs include a requirement for buffer zones for projects adjacent to a water of the state

- No minimum for unimpaired waters, but a buffer zone must be present (recommend **30 ft.** per the EPA permit)
- 50 ft. minimum for impaired waters and ONRWs (Outstanding Natural Resource Waters/Scenic Streams)

Buffer zones are required unless infeasible due to urban site constraints, construction of water features, etc.

If buffer zones are infeasible, alternatives such as check dams or berms should be utilized to protect the receiving stream.



Soil Stabilization



- Initiate stabilization of disturbed areas immediately whenever clearing, grading, excavating or other earth disturbing activities have ceased permanently or ceased temporarily (14 calendar days)
- Employ alternative stabilization measures where vegetative stabilization is infeasible
 - Note: "Immediately" is interpreted to be no later than the next work day; when weather and logistical factors prevent immediate stabilization, measures should be initiated no later than 14 days after the construction activity in that portion of the site has permanently ceased



Prohibited Discharges

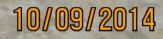


- Prohibited non-storm water discharges:
 - Washout from stucco, paint, oils, curing, or other compounds
 - Soaps or solvents used in vehicle and equipment washing
 - Fuels, oils, etc.
- Specific prohibitions on non-storm water discharges <u>without</u> a control (Part IV.F of the permit):
 - Concrete washout (may be done from chutes with adequate controls; washing out drums onsite is prohibited)
 - Dewatering of trenches, excavation pits (must utilize outlet structures that draw water from the surface of impoundments)



Lack of erosion control, such as a silt fence, causes sediment to be released into the streets, storm drain system, and ultimately waters of the state.

ertainTee



Properly installed and maintained silt fence.



nert

Good example of entrance designed to minimize tracking of sediment into street; silt fence effective; site was clean.

Tubes and wattles also perform to reduce storm water velocity and reduce sediment discharges.

Paint and chemicals should be covered or kept in containers to prevent contact with storm water.

PAINT



A variety of permeable storm drain protections are available.

Turbidity curtains are effective tools when working adjacent to flowing waters.



Downstream view of a release of storm water mixed with concrete wash water.

Concrete washout areas should be provided on each construction site where concrete work occurs.

No buffer and no controls cause significant erosion during storm events.



Use of seed, mulch, binder, and temporary vegetation.



Inadequate and poorly maintained erosion controls at a temporary stream crossing.

02/05/2014

Collapsed silt fence and displaced culvert.

Clean stone should be used in temporary crossings to prevent migration of fine sediment into the stream.

Contact Information



Water Permits Division Kimberly Corts Blake Perkins Debbie Bissett Alicia Walsh

(225) 219-9371

Small Business Assistance

Jason Dewitt

Pineville (318) 487-5528 Jason.Dewitt@la.gov

Faith Stephens

Monroe (318) 362-5429 Faith.Stephens@la.gov

