



Office *of the* Governor
JOHN BEL EDWARDS

CHALLENGES MET. PROGRESS DELIVERED.

Louisiana Department of Environmental Quality,
2016–2023

Introduction

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Message from LDEQ Secretary Roger Gingles

"Continuous Improvement" was the mantra of Dr. Chuck Carr Brown who headed LDEQ from January 2016 until leaving the agency on March 31, 2023. When Gov. John Bel Edwards picked me to finish out Dr. Brown's term as LDEQ secretary, he knew he was choosing someone who would be committed to carrying on Dr. Brown's vision.

The many accomplishments of this agency under Dr. Brown are highlighted by improvements in air quality, water quality, monitoring, personnel gains, key legislation passed, restoration of polluted sites and an unrelenting push to lower carbon emissions. LDEQ saw remarkable success during Gov. Edwards' tenure. Consider the success the agency saw in improving air quality, measured by some of EPA's criteria pollutants. According to emissions reports collected by LDEQ from 2016 to 2022, carbon monoxide emissions were reduced by 123,466 tons per year; nitrous oxide (a component of ozone) fell by 24,576 tons per year; sulfur dioxide dropped by 34,717 tons per year; and there are more reductions as charted on the attached graphic. These results are from just air quality. We are seeing gains in every area.

LDEQ is always looking for a better way, a more efficient way. We've worked with our federal and state partners to improve our air and water monitoring, streamline our permitting process and move as many of our function to online availability as possible.

As LDEQ secretary, Dr. Brown was an unwavering proponent of electric vehicles, solar power and other innovative solutions to long-standing environmental issues. I share those ideals and enthusiasm for the future.

Just as Dr. Brown was, I am dedicated to protecting human health and the environment of Louisiana. We have a great state -- a beautiful state that is home to resourceful and resilient people. I am proud of the work LDEQ has done for the past 7 years, and I will continue to pursue the lofty goals espoused by Gov. John Bel Edwards. Your reach should always exceed your grasp, and the following report outlines many ways we have reached for the highest environmental goals during Gov. Edwards' tenure. I know there is much left to do, but I am confident we have laid a solid foundation for the work to continue under those who follow us.

Executive Summary

From bumper stickers proclaiming "Love the Boot, Don't Pollute" to emissions-free electric vehicles purring down the highway, LDEQ under Gov. John Bel Edwards has been at the front of environmental activity. Our Hazardous Materials Collections Days lets us partner with citizens to help keep paints and household chemicals out of landfills and the environment. The paint is remixed and repurposed as an economical construction resource sold at a discount at Habitat for Humanity's ReStore.

The annual Environmental Leadership Program (ELP) recognizes businesses that make innovative and meaningful contributions to improving the environment of Louisiana. LDEQ's Envirothon event is a yearly competitive event organized by LDEQ which pits teams of high school student against each other in a test of their environmental knowledge. Winning teams receive awards.

These events are the icing on the cake. At heart, the agency is an environmental regulator. LDEQ surveillance personnel conduct inspections of facilities, respond to complaints and consult with other federal, state and local agencies. When there is a hurricane or fire or other disaster, LDEQ Emergency Response is ready to assist citizens and industry with their needs. When we discover existing contamination in water or soils, our remediation group works to address it. Our Brownfields team works to return contaminated properties to commerce. We have a

criminal investigation section which is our policing staff who investigate criminal behavior that impacts the environment.

LDEQ Office of Environmental Services processes permit applications for a wide variety of industries whose operations generate air, water or waste emissions that are subject to state and federal regulations. LDEQ works to ensure that those permits are protective of human health and the environment and don't just comply with regulations but limit emissions to the lowest practical levels.

The Office of Environmental Assessment keeps tabs on air quality, water quality, oversees remediation and underground storage tanks. This office maintains our ambient air monitoring system and our Mobile Air Monitoring Laboratories (MAMLs).

LDEQ personnel are stationed all across Louisiana. The agency has eight regional offices in addition to LDEQ Headquarters in Baton Rouge. Our responders can respond to a complaint from any parish in Louisiana, and all complaints LDEQ receives are investigated.

These are some of the areas and functions housed at LDEQ. More details about individual services and offices at LDEQ are available on the LDEQ website, <https://www.deq.louisiana.gov/>

Progress Delivered

2016

VW Settlement

The 2016 VW settlement resulted in \$18 million being awarded to Louisiana and an Environmental Mitigation Trust was established. LDEQ and LDNR pooled their shares to fund worthy applications, such as the replacement of or repowering of publicly owned school buses as provided in the Consent Decree and the replacement of or repowering of aging state-owned heavy equipment fleet vehicles that are eligible under the mitigation trust. The vehicles are being replaced with new cleaner vehicles and or new cleaner burning engines. The agencies solicited proposals for projects for the settlement monies. LDOT also shared in the settlement and applied its funds to upgrades of its aging fleet of vehicles.

LDEQ resumes fish tissue sampling for mercury

A consent decree was signed between LDEQ and NRG Louisiana Generating allocated funding to resume the fish tissue sampling program in late 2015 as part of a beneficial environmental project. Under the plan, 29 sites will be sampled in southwest Louisiana by the end of the year.

2017

Ozone attainment

Greater Baton Rouge reached a designation of attainment for the pollutant ozone in March 2017 under the EPA's 2008 ozone standard. The area includes Ascension, East Baton Rouge, Iberville, Livingston and West Baton Rouge parishes. In 2018, for the first time since the Clean Air Act revisions in the 1980s, the entire state of Louisiana has been in compliance with and in attainment for all National Ambient Air Quality standards except two small areas in two parishes that remain out of attainment for SO₂.

Attainment is the result of cooperation of all stakeholders including citizens, industry and governmental organizations that developed Ozone Action Plans, implemented stricter regulations, responded to early action days and limited their activities to avoid emissions. Additional partners include environmental and governmental groups as well as individual citizens who heeded Ozone Action Days and curtailed their activities.

Cleaner, healthier air was the immediate benefit of this achievement, but it also ensured the agency would continue to be able to exercise latitude in permitting new industries in the future.

Office of Environmental Assessment resurrected

LDEQ reorganized its structure to return assessment functions, such as inspections of facilities, to a separate office within the agency headed by an assistant secretary. The offices of Environmental Services (permitting) and Environmental Compliance (enforcement) relinquished those responsibilities for assessments they had been performing. The office of Environmental Assessment was originally created in 1999 and was responsible for remediation, engineering, geotechnical, planning and evaluation areas. The office was combined with the other two offices in 2010. The department received legislative approval to make the structural revision in 2016 and implemented the changes beginning in 2017.

Alternative Fuels Corridors

In 2017, the Louisiana Department of Environmental Quality (LDEQ) partnered with the Keystone Policy Center (www.keystone.org), with assistance from Louisiana Clean Fuels (www.louisianacleanfuels.org), to convene two multi-stakeholder meetings to discuss the viability of developing alternative fuels corridors within the state's borders. As the market ramps up for vehicles powered by natural gas, electric, propane, and other fueling sources, LDEQ recognized the need for developing a strong fueling and charging infrastructure that gives consumers (both individuals and organizations) confidence in purchasing and re-fueling these vehicles. A part of the VW Settlement is the Electrify America program, funded by \$1.2 billion from the settlement. The money will provide infrastructure funding to increase use of zero emissions vehicles (ZEVs) powered by electricity. The \$1.2 billion commitment will be spent in \$300 million increments over four 30-month cycles. Three of these chargers are currently located in Louisiana: at Hammond, Breaux Bridge and Sulphur.

LDEQ has a vision of multi-use fueling stations at key locations across Louisiana. These fueling hubs will offer not only charging stations for ZEVs, but pumps for alternative fuels like CNG and LPG as well as clean burning diesels and traditional fuels (gas, diesel) as the driving public transitions from high emissions fuels to more environmentally friendly fuels.

Highways designated Alternative Fuels Corridors by the Federal Highway Administration (FHA) are authorized to erect signage alerting drivers that the roadway offers access to certain types of fueling stations. LDEQ saw this as another piece of the energy puzzle and applied for the designation. Currently, the FHA has designated Interstates 10, 12, 49 and 20 as Alternative Fuels Corridors.

2017

Reed Vapor Pressure Rule Relaxed

In December 2017, EPA issued a final rule to relax the federal reed vapor pressure volatility (RVP) standard for 11 Louisiana parishes. The RVP standard is a measure of gasoline volatility. This allowed summertime gasoline to go from 7.8 RVP to 9.0 RVP. The 11 parishes were Beauregard, Calcasieu, Jefferson, Lafayette, Lafourche, Orleans, Pointe Coupee, St. Bernard, St. Charles, St. James and St. Mary. These parishes were able to sell 9.0 RVP gasoline beginning June 1, 2018.

On May 25, 2018, EPA Region 6 formally approved the revision to the State Implementation Plan (Baton Rouge Maintenance Plan) to allow for the sale of 9.0 RVP gasoline in the Baton Rouge 5-Parish area (Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge) in 2019. These changes resulted from improvement in the state's ozone status, and allow refiners to market less expensive blends during summer months, a benefit to consumers.

Fish Consumption Advisory Lifted for Sibley Lake

After over 30 years of sampling lake sediments and fish, along with extensive remediation work by Tennessee Gas Pipeline (TGP), the fish consumption advisory for Sibley Lake near Natchitoches was rescinded effective in November of 2018. The advisory had been in place since 1989.

New Air Monitoring Technology

In November 2019, LDEQ took delivery of two new Mobile Air Monitoring Laboratories (MAMLs), equipped with state-of-the-art air monitoring technology, including mass spectrometers and gas chromatographs. The new MAMLs join an existing vehicle and provide the agency with expanded response capability and reach. Under LDEQ Secretary Dr. Chuck Carr Brown, the agency implemented use of unmanned aircraft. LDEQ uses them in emergency response applications and is looking at uses in assessment and surveillance. One aircraft will be stationed at each of the agency's eight regional offices, and each office will have one trained pilot stationed there. The agency is developing both water and air sampling capabilities for the unmanned aircraft and will be able to collect samples in-flight

Safe Destruction of Explosives at Camp Minden

When a storage bunker exploded at Camp Minden in 2012, a subsequent investigation revealed that more than 15 million pounds of explosives had been illegally stored at the north Louisiana site by a defunct contractor. Working with EPA, the Louisiana Military Department, Louisiana State Police, local officials and political leaders, local citizen groups, the Department of Justice and the U.S. Army, LDEQ joined in finding a solution to disposing of the unstable material. Settling on a closed burn chamber as the most efficient and environmentally neutral disposal method, the interested parties worked together to get the project funded and built. The closed burn chamber went into operation in April 2016. The destruction of the explosives was complete in 2017.

2018

Online Fishing and Swimming Advisory Map

The Louisiana Department of Environmental Quality (LDEQ) online fishing and swimming advisory map was rolled out for smartphones. Users can use the app to determine if their local fishing spot is currently under a fish consumption advisory. When users click on the fish icons, the map brings up detailed advisory information that provides accurate details on which fish species, and how many meals of each species, can be safely consumed from that specific advisory water body. The advisory information also includes swimming restrictions. Released July 11, 2019, the app is available through Google Play and the Apple Store by entering the search term: LA Fish Advisories.

Statewide Outreach Campaign

Dr. Brown and his staff have adopted an aggressive outreach campaign to visit with and hear the concerns of citizens and public officials across Louisiana. LDEQ outreach has taken the secretary and/or members of his staff to the edges of the state, to Shreveport, to Lake Charles and New Orleans. They have listened at meetings in Colfax, LaPlace, Westwego, Shreveport, St. James, Edgard and many other locations. When meetings are not enough, the agency has used emails, phone calls, websites, television, social media, videos and news stories to get their message out: LDEQ is here to protect the health and environment of Louisiana.

2019

Interactive Map of Water Quality Report

LDEQ launched a new interactive map that details the water bodies included in the Louisiana Water Quality Integrated Report. The Louisiana Water Quality Integrated Report is the current format for the state's biennial reports on the water quality of Louisiana surface waters. The most current Water Quality Integrated Report, considered final and approved by the U.S. Environmental Protection Agency, is the 2018 report, which can be viewed via an interactive map at: <https://www.deq.louisiana.gov/page/louisianawater-quality-integrated-report>.

Bayou Bonfouca Swimming and Sediment Contact Advisory Lifted

After completion of sediment sampling in Bayou Bonfouca in January 2020, followed by detailed risk assessment analysis by LDEQ and the Louisiana Department of Health, the agencies signed a notice rescinding the long-standing swimming and sediment contact advisory on Bayou Bonfouca in Slidell. This marks the second time, following the December 2018 removal of a fish consumption advisory on Sibley Lake, that a chemical related advisory has been fully rescinded following remedial actions.

Contract Established with USGS to Expand Statewide Gauge Network for Louisiana Watershed Initiative

LDEQ will manage the contract with the U.S. Geological Survey. The addition of 100 or more gauges to the USGS network in Louisiana will aid in the watershed modeling conducted by the University of Louisiana at Lafayette as part of the Louisiana Watershed Initiative.

EPA 106 Grant to Compare Satellite Imagery Indicative of Harmful Algal Bloom Conditions to Field Data

The funding will support the field sampling and lab analysis of water samples in areas which satellite imagery indicates potentially harmful algal blooms. Data will then be used to confirm the usefulness of the satellite indicators.

2020

LDEQ Introduces First All-Electric Car to Vehicle Fleet

LDEQ expanded its vehicle fleet to include its first electric vehicle. With the electric vehicle (EV) charging infrastructure recently added to the Galvez Parking garage, LDEQ continues to work toward energy-efficient investments with the procurement of a Chevrolet Bolt EV.

Lake Providence Pollution Reduction

LDEQ worked with the Louisiana Dept. of Agriculture and Forestry and the Natural Resources Conservation Service to implement Best Management Practices in coordination with land owners around Lake Providence to reduce non-point source pollution into the Lake. The reduction in polluted runoff resulted in the water quality improving to a level which supports all designated uses and is no longer considered impaired.

\$800K Brownfields grant from EPA, plus \$300K for Southern Louisiana Brownfield sites

EPA awarded LDEQ an \$800,000 Brownfield Cleanup Revolving Loan Fund grant. In a separate funding announcement, EPA announced \$300,000 for Southern Louisiana Brownfield Sites Funds as part of \$6.9 million awarded nationwide. Louisiana's South Central Planning and Development Commission (SCPDC) will receive a \$300,000 Revolving Loan Fund for its South Louisiana Brownfields Coalition. The grant is part of \$6.9 million in supplemental funding EPA is providing for 25 current successful Brownfields Revolving Loan Fund (Revolving Loan) grantees.

2021

EPA Clean Air Excellence Award

The Louisiana Department of Environmental Quality (LDEQ) received the 2020 U.S. Environmental Protection Agency (EPA) Clean Air Excellence Award in the Community Action category for LDEQ's Temporary Located Community (TLC) Ambient Air Monitoring Program. The EPA Clean Air Excellence Awards Program periodically recognizes and honors outstanding innovative efforts to help make progress in achieving cleaner air. LDEQ's TLC Air Monitor Program exemplifies the agency's efforts in this undertaking. The LDEQ has been working to promote environmental justice in Louisiana for almost 30 years. The LDEQ began fostering relationships with under-served communities by bringing assistance via the TLC Ambient Air Monitoring Program.

This program has allowed LDEQ to expand its outreach to under-served communities and to respond meaningfully and effectively to their concerns. TLC Air Monitors collect ambient air quality data in neighborhoods using EPA approved methods and protocols for at least one year. The data is collected and relayed to LDEQ's website, <https://airquality.deq.louisiana.gov/Data>, providing real-time data on the extent of outdoor pollution and air quality pollution trends of certain regulated pollutants. LDEQ regularly meets with various community groups as it conducts its business of environmental stewardship. These locally led, community-driven solutions help to improve environmental protection and have become a key component in LDEQ's mission to protect human health and the environment in Louisiana.

Roving Monitoring with MAML

In 2022, LDEQ began a roving monitoring program using the department's two Mobile Air Monitoring Laboratories (MAMLs). One of the MAMLs is deployed each month to supplement ambient air monitoring data collected at stationary monitoring sites. These missions typically last between 3 and 5 days. Since beginning the roving monitoring program, LDEQ's MAMLs have visited Dutch Town, Nine Mile Point in New Orleans, St. James, Luling, Alexandria and more locations. The MAMLs are used to collect an array of data to determine background levels of criteria pollutants and other constituents of concern.

Funding for Clean Water

LDEQ, through its Clean Water State Revolving Loan Fund, provided \$65 million to help fund a \$96 million pump station in Donaldsonville where Bayou Lafourche meets the Mississippi River. In addition to providing critical fresh water to the degrading estuaries, this pump station will also protect the drinking water supply for citizens of Ascension, Assumption, Lafourche, and Terrebonne parishes, ensuring they have access to an adequate supply of clean and safe water to drink

Water Quality Trading Program

Water quality trading (WQT) is an innovative, market-based, cost-effective mechanism to help achieve local water quality improvements. In WQT, sources with high costs of reducing pollution can purchase equal or greater pollution reductions from sources with lower costs. This cost difference provides an incentive for trading to occur. LDEQ is currently developing a WQT program, supported by state legislation and consistent with the Clean Water Act, and state and federal law, to facilitate trading among watershed stakeholders interested and eligible in participating in trading opportunities. A public hearing on the proposal was held in March 2019 after the notice of intent was published in the Louisiana Register in January. This WQT program will allow participation by both point sources and nonpoint sources to help achieve water quality goals.

2022

More Community Monitors

LDEQ's Air Assessment and Planning Division won two competitive EPA air-monitoring grants announced in November. The agency will receive more than \$902,000 to add temporarily located community (TLC) monitors in Alexandria and St. James Parish. The monitor in Alexandria will be located between two wood-treating plants in an area that has been the source of air quality complaints for several years. The monitor in St. James Parish has not yet been sited, but once it is in place, it will provide local residents with real time AQ data available online through our website.

2023 Recurring

Hosting Litter Conference

Keep Louisiana Beautiful conferences and Environmental Leadership Awards have been held at LDEQ headquarters for the past several years. These endeavors highlight organizations, companies and individuals who are striving to promote pro-environmental causes. Conferences provide resources and education for those interested in establishing zero-waste practices, recycling programs and beautification projects. LDEQ has also hosted several Enviroschools as educational tools that serve to inform the public on LDEQ processes while promote agency outreach endeavors.

Clean Water Effort

The Drinking Water Protection Team and Nonpoint Source section continue to canvass the state, giving presentations to the public to promote the importance of protecting drinking water, understanding aquifers, ensuring for the reduction of harmful runoff, and imparting information concerning the potential susceptibility of public drinking water sources.

Electric Push

LDEQ has supported National Drive Electric Week each year to encourage electric vehicle use across the state in the push to reduce vehicle emissions. LDEQ also promotes electrical vehicle use and has deployed a Chevy Bolt EV for use in its operational fleet.

2016

SB 140 – Provided for the organization of the Department of Environmental Quality

2017

HB 423 – Authorized the secretary of the Louisiana Department of Environmental Quality to establish water quality trading program

2018

HB 142 – Increased the waste tire disposal fee applicable to passenger and light truck tires

Expanded Ambient Air Monitoring System

New monitors have been added to the agency's statewide ambient monitoring network each year through EPA grants, growing the total to 41 monitors. In addition, the use of the Mobile Air Monitor Laboratories (MAMLs) to perform roving missions each month has allowed the agency to expand its air quality (AQ) data with background readings from selected sites around the state. The AQ data is vital for LDEQ to tailor its regulatory policy to ensure that human health and the environment are protected.

Working with Industry to Reduce Reliance on Carbon Fuels

More than 60% of carbon emissions in Louisiana originate from industry. These climate change triggering gases are mainly produced by burning fossil fuels for power. By working with industry to convince them to switch to solar, wind and alternative power sources such as hydrogen and hydroelectricity, LDEQ is working to reduce industry's carbon footprint.

Legislation

2019

HB 125 – Provided for the maximum civil penalty for citations issued through the expedited enforcement program

2020

HB 691 – Reinstates the Brownfields Cleanup Revolving Loan Fund and program

2021

HB 72 – Authorized the secretary of the Department of Environmental Quality to establish voluntary self-audit program

Regulation and Policy Changes Implemented

May 20, 2016

Electronic Submittal of Discharge Monitoring Reports (DMRs) LAC 33:IX.2701: Adopted the EPA Federal Regulation that requires National Pollution Discharge Elimination System (NPDES) regulated entities to submit Discharge Monitoring Reports (DMRs) electronically through a department approved electronic document receiving system unless granted an electronic reporting waiver.

May 2017

Emission Reduction Credits (ERC) from Mobile Sources, LAC 33:III.603, 605, 606, 607, 611, 617 and 619: Allows credible emissions reductions from certain mobile sources such as cars, trucks, motorcycles, marine vessels, locomotives and non-road engines to be qualify as ERC.

Electronic Notice of Air Permit Actions, LAC 33:111.504.E, 509.Q and 531.A: The rule allows LDEQ to provide public notice of all air permit actions, including Title V and Prevention of Significant Deterioration (PSD) permits, by posting on the department's website instead of publishing advertisements in The Advocate and in local newspapers. The rule also allows LDEQ to make certain documents available via the department's Electronic Document Management System (EDMS) rather than at a physical location in the area of a proposed source or modification.

Aug. 20, 2019

AQ382 Incorporating Test Results, LAC 33:III.523.A and LAC 33:III.537.A: The rule amends Louisiana General Condition I to 1.) specify that if testing reveals emissions are greater than those allowed by a permit, an application to modify the permit must be submitted no later than 90 days after the permittee receive the final test results; 2.) clarifies that discovery of excess emissions does not necessarily compel the permittee to suspend operations of the subject emissions unit(s), provided the excess emissions do not cause an emergency condition and the permittee reports the excess emissions in accordance with applicable regulations; and 3.) reaffirms that noncompliance with any term or condition of a permit constitutes a violation and is grounds for enforcement action.

July 20, 2020

HW124 Hazardous Waste Generator Improvements Rule (LAC 33:V.105, 108,109,110,301, 305, 311, 321, 329, 501, 1001, 1003, 1005, 1007, 1009, 1011, 1013, 1015, 1017, 1019, 1021, 1023, 1025, 1027, 1029, 1031, 1035, 1037, 1039, 1041, 1043, 1045, 1047, 1049, 1051, 1053, 1055, 1057, 1059, 1061, 1063, 1065, 1067, 1101, 1103, 1105, 1107, 1109, 1111, 1113, 1121, 1127, 1199, 13101, 1305, 1309, 1319, 1501, 1509, 1513, 1516, 1529, 1705, 1709, 1713, 1717, 1802, 1901, 1903, 1905, 1907, 1909, 1915, 2101, 2109, 2117, 2201, 2205, 2245, 2246, 2249, 2317, 2523, 2604, 2723, 2805, 2917, 3001, 3003, 3017, 3121, 3513, 3515, 3801, 3805, 3821, 3829, 3843, 3851, 3867, 3873, 3883, 4003, 4007, 4013, 4035, 4049, 4069, 4105, 4141, 4143, 4145, 4217, 4301, 4317, 4385, 4438, 4501, 4549, 4561, 4901, 4907, 5101, 5121 and 5307):

The rule adopted the federal Generator Improvements Rule which amends the hazardous waste program as relating to generators. It reorganized the regulations to make them more user friendly, provides a better understanding of the program, addresses regulatory gaps to strengthen environmental protection, provides greater flexibility for generators to manage hazardous waste, and makes corrections to address inadvertent errors and remove obsolete references. The rule provides additional clarification and updates specific to the hazardous waste program in Louisiana. Louisiana is authorized by the EPA to administer the hazardous waste program under Subtitle C of the Resource Conservation and Recovery Act. One requirement for retaining its authorization is to maintain state hazardous waste regulations so that they are equivalent or more stringent than corresponding federal regulations.

July 20, 2021

IA06 Brownfields Cleanup Revolving Loan Fund Program, LAC 33:VI.1103, 1107, 1109, 1111 and 1113: A brownfields site is real property, the expansion, redevelopment or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant or contaminant. Such property may also be referred to as a brownfields or brownfields property. The rule removed the requirement that only brownfields sites enrolled in the LDEQ Voluntary Remediation Program qualify for the LDEQ Brownfields Cleanup Revolving Loan Fund. The change allowed LDEQ to financially expand the LDEQ Brownfields Cleanup Revolving Loan Fund to a wider base of properties and to clean up and redevelop a larger number of brownfields properties.

July 20, 2022

OS097 Expansion of the Expedited Penalty Program LAC 33:I.807: The rule added additional hazardous waste, solid waste, underground storage tank, water, radiation and air violations to LAC 33:I.807. The rule also clarified language in the rule and adjusted some penalty amounts for specific regulatory violations. The rule expanded the program to include additional minor violations with no additional cost. The change was designed to provide an alternative penalty assessment mechanism that department can use at its discretion to expedite penalty agreements in appropriate cases, reducing staff time and increasing efficiency in addressing such violations.

Challenges Met

03

Debris Removal After the 2016 Flood

LDEQ's Emergency Response, Water Survey Section and Surveillance Division regional offices deployed personnel, boats, vehicles and resources to assist in the recovery and response effort during the event. LDEQ headquarters deployed six boats supported by three boats from the Acadiana Regional Office in Lafayette. LDEQ personnel assisted in water rescues in flooded communities, including helping to evacuate residents at a Denham Springs nursing home. LDEQ oversaw the removal of more than a million cubic yards of flood debris in Baton Rouge and surrounding parishes after the flood. This massive collection of wet carpet, furniture, soggy paper, water-damaged furniture, wet drywall, photos, televisions, appliances, personal effects, clothing, soaked mattresses, floor tiles

and more comprised the detritus of shattered lives. It presented a daily reminder of what was lost. It stank. It was attractive to vermin. It was an eyesore.

By streamlining the debris removal process using preapproved staging areas, sorting and disposal of the mountains of debris were speeded up. One removal contractor estimated the staging areas alone shortened disposal times by a third. It remained a painful process, but one that had to be done. LDEQ helped accomplish the job quickly and in an environmentally sound manner.

LDEQ Responded to an Unprecedented Number of Hurricanes

LDEQ's Emergency Response Division led a multi-media response during a particularly busy storm and hurricane season across the state. Emergency Declarations and Amendments were issued directing the emergency response protocol and agency mechanisms during the damage assessment and recovery process.

LDEQ partnered with several local, parish, state and Federal entities during each event's complete response, including pre-storm safety protocols, communication with facilities and pre-/post-storm planning, orphaned drum locations, facility fire/safety issues, overall damage assessment (ground and overflights), and post-storm evaluation and recovery.

COVID-19

In February of 2020, there had not yet been a single Covid-19 case in Louisiana. Nationally, only two deaths from Covid-19 had been reported. Gov. John Bel Edwards spoke at the Baton Rouge Press Club and asked Louisianans to remain calm and access reputable sources like the Louisiana Department of Health and the Centers for Disease Control to get the latest information. By March, a wave of infections had swept the country and Louisiana was in the grip of a massive outbreak. In response, LDEQ instituted a work-from-home policy that allowed a maximum number of agency personnel to work from their homes using agency computers (telecommuting). That measure went into effect March 17 and was meant to comply with social distancing recommendations from the CDC and the LDH.

LDEQ stayed open for business. Agency offices operated with reduced staff, and emergency response calls and citizen complaints were handled as they always are. Telecommuting staff continued to process permit applications and perform their assigned work. LDEQ management restricted staff travel and postponed hearings and meetings when necessary. Industry inspections were also delayed. Although LDEQ remained open for business, public access to LDEQ worksites was restricted. Masking requirements were strictly observed, and when the Covid-19 vaccines became available, LDEQ employees were urged to get the shot.

Sadly, all the preventive measures could not keep the LDEQ employees from falling victim to the virus. The agency saw many cases of Covid-19, and on Feb. 4, 2021, we recorded the death of a staff member. LDEQ did not lose another person to the epidemic, but one is too many.

Hurricane Ida Cleanup

Ida was a deadly and extremely destructive Category 4 storm that became the second-most damaging and intense hurricane to make landfall in Louisiana on record, behind Hurricane Katrina in 2005. In terms of maximum sustained winds at landfall (150 mph (240 km/h)), Ida tied 2020's Hurricane Laura and the 1856 Last Island hurricane as the strongest on record to hit the state.

The destruction from Hurricane Ida's path through southeast/south central Louisiana left behind 20.4 million cubic yards of debris (U.S. Army Corps of Engineers estimate). The debris removal effort has been overseen by LDEQ through management of the parish Emergency Debris Sites (EDS). By 2023, 16.4 million cubic yards, or 81 percent, of the debris generated by the storm in Louisiana have been removed. Debris removal work is ongoing.

Leaving Louisiana Better Than We Found It

04

Capitol Lakes Added to EPA National Priority List

The Capitol Lakes site encompasses three lakes in Baton Rouge, Louisiana: North Lake, South Lake, and East Lake and occupies 60 acres adjacent to the Capitol Building and the Governor's Mansion. In 1972, Polychlorinated Biphenyls (PCBs) were detected in the sediment, PCBs are a variety of chemicals that can cause liver damage and skin conditions. In addition to PCB-contaminated sediments, PCBs have been detected in fish tissue samples collected from North and South lakes beginning in the 1980s and in April 2022. Based on detected PCB concentrations in the fish tissue samples, a fishing advisory was established to warn residents of the issue and is still in place as of March 2023. LDEQ conducted a Remedial Investigation/Feasibility Study in the late 1990's. Currently, LDEQ continues to collect fish tissue samples on an annual basis in support of the fishing advisory. The LDEQ referred the site to the EPA in spring/summer of 2021, once it was discovered long-term remediation options were limited. In April 2022, EPA performed a site reassessment on the lakes, in which both sediment samples and fish tissue samples were collected and analyzed for chemical constituents. Chemical analysis of lake sediment samples indicated the presence of PCBs. Fish tissue analysis continued to detect PCB concentrations above the Human Food Chain Cancer Risk benchmark. The site has been added to the NPR, and when funding is committed, remediation work will commence.

Developing Municipal Sewage Systems that can be Expanded and Consolidated Into Regional Systems

Through its Clean Water Revolving Loan Fund, LDEQ provides funding for restoration and construction of robust sewage treatment systems for municipalities across Louisiana. All the work is designed to be compatible with regional treatment systems that can evolve in the future from consolidation of existing systems. Expanding sewage service and improving wastewater treatment is key to sustaining clean, productive water resources in Louisiana that can support all designated uses.

Promoting Conversion to Solar, Wind and Water Energy Sources

As part of the agency's commitment to the Governor's Climate Change Task Force's carbon reduction goals, LDEQ is promoting alternative fuels for use in power generation and electric vehicles for transportation. To reduce carbon emissions in both the generation of electricity and generation of power at facilities, the agency is promoting solar generation of electricity, wind generation of electricity and hydroelectric sources. In addition, the agency is a participant in the carbon capture and sequestration (CCS) regulatory process. CCS will facilitate production of green hydrogen, blue hydrogen and blue ammonia, zero emissions fuels.

Hypoxia Task Force

LDEQ has been actively involved in the Mississippi River/Gulf of Mexico Watershed Nutrient Hypoxia Task Force to address nutrient management within the basin. The Force studies the causes and effects of eutrophication in the Gulf, while coordinating activities to reduce the causes of hypoxia.

Stories of Our Success

05

LDEQ and LDOC makes hand sanitizer to combat COVID-19

As soon as medical experts recommended the use of hand sanitizers to fight the spread of COVID-19, the product vanished from store shelves. It was cleaned out by panic buyers.

LDEQ's staff is laden with scientists with a high level of technical expertise. Agency leadership wanted to help the fight against COVID-19 any way they could, and so they decided to put that expertise to work and make some hand sanitizer for free distribution.

The World Health Organization (WHO), has a formula for hand sanitizer posted on the Internet. The recipe requires three main ingredients: isopropyl alcohol, glycerol and hydrogen peroxide. The Secretary of State's Office had acquired small amounts of some those ingredients to produce a batch of sanitizer to be used to clean voting machines in the April 4, 2020 Democratic Primary. The cleaner was to have been mixed by inmates at Prison Enterprises. When the coronavirus emergency intensified, that election was postponed until June. The leftover ingredients were available.

LDEQ Secretary Chuck Carr Brown and Department of Corrections Secretary Jimmy LeBlanc put their heads together and came up with a plan to make more hand sanitizer to meet the high demand for it in Louisiana. The only snag was getting more of the main ingredients. Surveying industry sources, LDEQ personnel located manufacturers of each of these ingredients in Louisiana. The companies were happy to donate the chemicals for the fight. ExxonMobil donated isopropyl alcohol of proper purity, Proctor & Gamble provided the glycerol and Solvay provided the hydrogen peroxide.

The Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) purchased some small bottles for the sanitizer. GOHSEP also distributed the sanitizer.

Mixing the ingredients has to be done carefully. Explosive fumes can result. As the operation began at Prison Enterprises March 24, LDEQ was on-hand with a monitor to make sure no harmful gases built up. LSU chemistry professor and chemistry department chairman John A. Pojman, Ph.D., and LSU chemistry graduate student Anthony Mai provided additional expertise.

"We have a 700-gallon poly tank on a platform about two-and-a-half or three feet off the floor," LDEQ Environmental Scientist Senior/Disaster Coordinator Daniel Lambert said. Lambert has been LDEQ's liaison in the manufacturing project. "They mix the batches in the tank, adding the ingredients in a fixed sequence. Liquid nitrogen is fed into the tank from the bottom and bubbles through the mixture to homogenize it. We have a line coming out of the tank to carry any fume to a carbon scrubber - 250 pounds of activated carbon in a 55 barrel drum. Any vapor will be captured there."

"I am pleased LDEQ is able to assist this project. Every little thing counts in the battle to flatten the curve of COVID-19," Brown said. LDEQ remains open for business, he said, and is still meeting its obligations even though its offices are closed to the public. "We are busy coping with our normal workload and adjusting to so many of our staff working from home but we will go the extra mile to contribute to this effort."

Success restoring Lake Providence to its designated uses

The cleanup story of Lake Providence has been a tremendous environmental achievement. The historic action taken by Lake Providence residents to help improve the quality of their beloved lake shows the dedication Louisiana citizens have to preserving the natural beauty of our state.

Lake Providence is an oxbow lake of the Mississippi River in East Carroll Parish on the Louisiana-Mississippi border. The lake is known for its natural beauty, boating, fishing and various water sports. It has been revered as a natural gem of northeast Louisiana for generations. The lake was named by early settlers because they believed it to be a "God-given" asset. If you have visited the lake, you know it lives up to its name.

For years, the lake was affected by runoff pollution from nearby farmland through tributaries and canals that web the land. The pollution caused an impairment of fish and wildlife propagation (FWP). Total dissolved solids (TDS) concentrations surpassed the state standard for FWP, and Lake Providence was listed as impaired in the Louisiana Department of Environmental Quality (LDEQ) 2016 Integrated Report. Residents decided a cleanup of the lake was necessary because the lake water had major siltation and high turbidity. It became a real concern for them because the namesake lake is the focus of the town.

Lake Providence locals and farmers collaborated with the Louisiana Legislature in 2015 to create the Lake Providence Watershed Council

(LPWC) to enhance and protect the health of the lake. The council named LDEQ as a partner as the agency observed and tested water quality at 11 locations around the lake through its Nonpoint Source Pollution Program and Water Surveys. The U.S. Department of Agriculture Natural Resources Conservation Service (USDA NRCS) was also named a partner to execute its best management practice (BMP), and Lake Providence became a watershed on the NRCS Mississippi River Basin Healthy Watershed Initiative (MRBI).

The goals of MRBI at Lake Providence were to reduce soil loss and refine nutrient management through using better techniques, fall tillage reduction and use of cover crops. NRCS worked with the Louisiana Department of Agriculture and Forestry (LDAF) and the East Carroll Soil and Water Conservation District (SWCD) to implement BMP across the lake. Outreach plans with SWCDs and implementation of the methods provided from October 2016 to 2020 shows that TDS levels have diminished significantly, and FWP can once again be supported in Lake Providence. LDEQ removed Lake Providence from its Integrated Report in 2020.

Lake Providence residents have much love and pride for their lake. It is the defining feature of the area and a major attraction for recreational activities. Locals want to preserve the lake for future generations because they want their descendants to know the same beauty they have. Some even wish to see the lake become a national park in their lifetime.

BY THE NUMBERS

06

Permits Issued

Since 2016, LDEQ Office of Environmental Services issued 23,482 water permits, 229 bio-solids permits, 531 hazardous waste permits, 1,205 solid waste permits and 12,067 air permits.

Enforcement Actions

Since 2016, LDEQ has issued 5,918 enforcement actions.

Settlements

Since 2016, LDEQ has reached 619 settlements.

Social Media

LDEQ Facebook page: Our reach is 109,806 users. Daily page visits are 9,711 and our new likes are 488.

LDEQ Twitter feed: (Impressions/engagement data goes back only a year)

930 followers gained since June 2016

7,051 impressions gained since June 2022

Staffing Changes

In 2016, there were 677 employees at LDEQ. Ten years previously, the agency had more than 1,000 employees.

In 2017, one position was added to the Office of the Secretary for an internal auditor and six positions were added to the Office of Management and Finance for Human Resources, and the agency had 684 employees.

LDEQ grew to 698 employees in 2018 as two positions were added in the Office of Environmental Services for the Storm Sewer System Permitting Program, one position was added to the Office of Management and Finance for a drone pilot, and 11 positions were added to the Office of Environmental Assessment for the Mercury Program, SO₂ Program, LOSCO NRDA Program, BP Oil Spill NRDA Program, and Watershed Reach and Boundary Management Program.

The number of employees topped 700 at LDEQ in 2019. Four positions were added in the Office of Environmental Assessment for the MAML crew and the agency reached 702 employees.

Four positions were added in the Office of Environmental Services for the Hazardous Waste Program in 2020, bringing the number of agency employees to 706.

During 2021, two positions were added in the Office of the Secretary and one position in the Office of Management and Finance to convert job appointments to authorized T/O positions, and one position was added to the Office of Environmental Assessment for the River Gauge Program. LDEQ ended the year with 710 employees.

Three positions were cut in the Office of the Secretary from the Criminal Investigations Division and one position was cut from the Office of Management and Finance from the Aircraft Services Division in 2022. One position was added in the Office of Management and Finance for the Clean Water Revolving Loan Fund. LDEQ's total number of employees shrank slightly to 707.

Brownfields Projects

LDEQ's Brownfields Program collaborates with redevelopment partners statewide as well as EPA to address environmental concerns at vacant and underutilized properties to facilitate their reuse. Since 2016, LDEQ completed 51 environmental assessments and assisted with the cleanup of 11 sites statewide, especially targeting rural and underserved communities and resulting in over \$90 million in leveraged funding. Sixteen (16) sites completed LDEQ's rigorous Voluntary Remediation Program process, readying over 50 acres of land for redevelopment. In addition, LDEQ supported 12 local Brownfield Programs statewide as well as two environmental job training programs.

To encourage communities to utilize the Brownfield Program, LDEQ partnered with local municipalities, community leaders, businesses, nonprofits, planning commissions, and economic development agencies, as well as statewide entities such as the Louisiana Municipal Association, the Police Jury Association of Louisiana, the Louisiana Trust for Historic Preservation, and Louisiana Main Street, hosting or presenting at over 50 events. Interagency collaborations included teaming up with the Office of State Lands, the Department of Health, Louisiana Economic Development, the Office of Community Development, and the Governor's Office of Rural Development.

Since 2016, LDEQ secured more than \$2.8 million in funding including a Brownfield Cleanup Revolving Loan Fund to support cleanup activities as well as over \$4 million in funding under the Bipartisan Infrastructure Law (BIL). Notable projects include the Bayou Treme Center Site and the Tate Etienne and Prevost Center to promote racial understanding in New Orleans, the Villas at Spanish Court in Minden, the Old Federal Courthouse (now The Municipal) and the Bottle Arts Lofts in Lafayette, Moran Galvanizing in Shreveport, and the Haywilk Galvanizing/ Gulf Coast Scrap project in Harvey.

Clean Water State Revolving Fund

This program provides financial assistance in the form of low interest loans to finance eligible projects, bringing them into compliance with the requirements of the federal Clean Water Act. Funding for this program is provided by federal grants and match funds generated by the program's interest and loan repayments. Interest and loan repayments provide a permanent source for funding in future Louisiana projects.

Since 2016, the fund has closed 65 loans totaling \$347,484,244.87.





Office of the Governor
JOHN BEL EDWARDS
2016–2024