DISCOVER DEQ
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY NEWSLETTER

December 2016 Issue Number: 59

What's Inside?

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Baton Rouge redesignated to attainment for the 2008 8-hour ozone standard

The journey to better air quality for East Baton Rouge, West Baton Rouge, Iberville, Ascension and Livingston parishes has been long and difficult. But once again, this area has reached attainment. LDEQ, the Baton Rouge Clean Air Coalition, industry, local governments and individuals have worked together to reach another milestone, attaining the 2008 8-hour ozone standard. Last month LDEQ had a celebration of the upcoming redesignation.

The U.S. Environmental Protection Agency redesignated the Greater Baton Rouge Nonattainment Area (BRNA) to attainment for the 2008 8-hour ozone standard. The state of Louisiana submitted a request for EPA to redesignate the BRNA to attainment status and to approve a State Implementation Plan (SIP) revision containing a maintenance plan for the area. This is another milestone in Louisiana's continuing effort to improve air quality.

EPA also approved the state's 10-year plan for maintaining attainment of the 2008 8-hour ozone standard in the area and determined that the BRNA continues to attain the 2008 8-hour ozone National Ambient Air Quality Standard and has met the criteria for re-designation to attainment.

"There has been a concerted effort to improve air quality and it has involved all facets of our communities," LDEQ Secretary Dr. Chuck Carr Brown said. "It's a testament to industry leaders, the public and LDEQ employees who all worked diligently for better air quality."

The proposed rule to approve the BRNA redesignation request and SIP revision was published in the Federal Register on Nov. 4 and the public comment period closed on Dec. 5. No comments were received on the proposed approval.

This accomplishment was made possible through the cooperation of LDEQ, industry, local governments, communities and individuals in the five-parish Greater Baton Rouge area (which encompasses the parishes of East Baton Rouge, West Baton Rouge, Livingston, Iberville and Ascension).

DISCOVER DEQ
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY NEWSLETTER

December 2016 Issue Number: 59

Message from the Secretary

Chuck Carr Brown, Ph.D.

I hope you all had a joyous holiday season and will have a happy New Year. Remember to stay safe in all you do and recycle gift wrappings and natural Christmas trees.

Before I go any further, it is appropriate to mention ozone attainment one more time. On December 15, the 5-parish Baton Rouge non-attainment area was re-designated to attainment for the 2008 8-hour ozone standard. The parishes affected are East and West Baton Rouge, Ascension, Livingston and Iberville. Congratulations to all on a job well done! As most of you know, EPA changed the ozone standard this year. It is now 70 ppb, so we know that we won't likely stay in attainment for long. But we are very close to the new standard and expect to be in attainment for it before long. We're going to keep working hard to reduce ozone and get in compliance with the new standard.

Later this year, we plan to take delivery of a new MAML. The purchasing process has been more complicated than was originally anticipated, but our intention has not changed. We will be getting another MAML. This resource is expected to expand our on-site monitoring capabilities and to cut response times when we do send a MAML out to a site.

The year is winding down, and we are still dealing with debris from the August flood. Some area parishes are still working to find ways to recycle e-goods and dispose of white goods with flood damage. On Dec. 22, I signed a 30-day extension of the Emergency Declaration for Livingston Parish only. It will allow them to set up a temporary staging area for white goods. We want to help our local municipalities and parish governments in every way we can. It was an extremely traumatic event and recovery is on the top of everyone's list now. We all need to be patient and help find solutions to the lingering flood issues.

The communications section has been out shooting a new informational video about home sanitation systems. The film crew visited a home with a home system and is putting together a YouTube video that shows how homeowners can inspect their systems to make sure the systems are operating properly. When a home system is not working properly or is shut off for some reason, the discharge can cause fecal coliform levels to rise and oxygen levels to drop. We don't want that. Homeowners and stakeholders don't want that either, so this outreach effort is designed to get homeowners to take ownership of the project.

I spoke at the Hypoxia Task Force meeting in New Orleans on Dec. 6. It was a good event, well-attended and well organized. The aim of the group is to finds ways states can reduce their nutrient contribution to Mississippi River drainage. Those nutrients, phosphorus and nitrogen, are the root cause of the annual hypoxic zone in the Gulf of Mexico off the Louisiana coast. In that zone, there is so little dissolved oxygen, that aquatic life is severely impacted. Louisiana doesn't contribute much to that nutrient load, but the hypoxic zone affects Louisiana more than any other state. There was some fruitful discussion at the meeting of possible trading programs where states that reduce their nutrient runoff can receive credits for possible banking or marketing. It's just one solution, but it's creative and encouraging to see that kind of thinking going into improving water quality in the river and in the Gulf of Mexico.

After the holidays have passed, we can all expect an ambitious agenda for 2017. The resurrected Assessments Division will begin operating in January. Expect there to be some kinks to iron out at first, but with a good effort from everyone involved, the new division will sort itself out quickly.

DISCOVER DEQ
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY NEWSLETTER
December 2016 Issue Number: 59

ERC Conference to be held at LDEQ Jan. 26

If you are interested in emission reduction credits (ERC), the Louisiana Department of Environmental Quality (LDEQ) and the Baton Rouge Clean Air Coalition (BRCAC) are holding an ERC Conference at LDEQ Headquarters.

The daylong conference will feature speakers from a variety of sectors and discussion of how to create and bank emission reduction credits. Dr. Chuck Carr Brown, LDEQ Secretary, will open the conference.

LDEQ will soon be implementing a revision to its emissions reductions credit (ERC) banking rule that expands the eligibility of emission reduction projects to mobile sources (e.g. trucks, marine vessels, trains). Implementing this new ERC strategy will help improve Baton Rouge air quality and mitigate constraints to economic development of the current "point source only" banking system.

To help the regulated community and general public better understand the ramifications of this banking rule revision, BRCAC, in conjunction with LDEQ, is sponsoring a conference to be held Thursday, Jan. 26, at the LDEQ Conference Center located at LDEQ headquarters in the Galvez Building, 602 N. 5th St. in downtown Baton Rouge.

Speakers will address the specifics of the new banking rule (AQ365); air quality and economic benefits; ERC project opportunities with roadway, marine, and rail emission sources; a new information resources website; interpollutant trading; Baton Rouge area emissions credits markets; legal issues with the new ERC program; and comparisons with a similar program being developed in Texas.

Lunch and snacks will be provided. The conference is free but registration is required. If interested, you may register at https://louisianacleanfuels.starchapter.com/meet-reg1.php?mi=342180&id=33.

LDEQ's flight capability expands its environmental protection oversight

When a spillway opens, a flood washes over the riverbanks, a fish kill appears on a waterway or a storm leaves debris strewn across the landscape, LDEQ takes to the air to investigate.

Depending on the nature of the mission, LDEQ will use either a seaplane or their primary plane, a twin-engine Aero Commander, to conduct the overflight. Such flights are an important part of the department's mission to protect health and the environment before, during and after any number of environmentally critical activities. Getting an aerial look also gives the staff a better picture of the environmental conditions. That is a vital tool in the emergency response effort. Flights are particularly critical during post-storm reconnaissance as the situation on the ground must be assessed.

At the helm during such operations is LDEQ Chief Pilot Bruce Stamey, who's logged around 15,000 flying hours during 36 years of flying for state agencies and in the private sector. Stamey is also certified and experienced as a flight instructor.

Stamey's tenure with LDEQ began about 18 years ago when he was a chief pilot for the Louisiana Department of Wildlife and Fisheries. One of his passengers during a flight was Dale Givens, LDEQ Secretary at the time, who was left impressed with his skills. A year later, LDEQ's pilot departed and Stamey was hired to fill the role.

Stamey's auspicious track to the pilot's seat began during his college days while working for a geotechnical engineering company in between semesters while studying architecture at LSU. In need of an aircraft pilot, the company's owner offered Stamey paid flight training – an offer which he accepted and took to very quickly with a rapid course of intensive study. "After the medical exam

Continued on page 4

DISCOVER DEQ
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY NEWSLETTER
December 2016 Issue Number: 59

and written test, I learned on a fast-track and soloed on my second day," Stamey said. "Three weeks later, I had my pilot's license."

After flying for the company for a while, Stamey began piloting several charters, flight instructing, teaching aerobatics, and conducting pipeline inspections and a variety of low-level flights for oil companies. Logging hundreds of hours flying at or below 100 feet gave him the much needed experience to fly for the state of Louisiana – as many state flights tend to be closer to the ground in order to get a better visual on conducting environmentally based surveys and coastal inspections. Flying those assignments for the Louisiana Wildlife and Fisheries for about 11 years gave him the necessary skill set to fly similar trips for LDEQ.

While some flights involve the transportation of staff (both LDEQ and interagency) to EPA's headquarters in Dallas, or to LDEQ regional offices, response and surveillance activities are also a big part of the mission. Those are known as overflights, and are typically operations such as landfill or gravel pit surveys, spillway openings and closings, fish kill assessments and emergency response activities related to storms, hurricanes, floods and oil/chemical spills.

Such overflights are vital in the assessment of ground conditions, pre- and post-event. In fact, during 2005's Hurricane Katrina response and recovery, LDEQ's overflight response over Greater New Orleans marked LDEQ as the first state agency to arrive in the air – second only to the air presence provided over the region by the U.S. Coast Guard.

While an exciting venture, the road to becoming a pilot can be complicated, and licensing must be kept up to date. Pilot's licenses consist of three categories: Private, Commercial and Airline Transport. Stamey holds an Airline Transport Pilot license, and is certified to teach all three, including single engine land and sea and multi engine land. He also maintains an instrument rating, known as Instrument Flight Rules. He also assists other agencies by conducting "check rides" as a flight instructor, and maintains close relationships with the pilots from Louisiana State Police and LDEQ's other partnering state agencies.

LDEQ Chief Pilot Bruce Stamey stands in front of one of the department's primary planes, the Aero Commander 500 Shrike.

LDEQ's Cessna 185 Floatplane has been used for water insertions, such as oil spill assessments, hurricane damage and coastal marsh assessments, fish kill surveys, fish sampling and coastal erosion efforts.

Aircraft are housed at the Baton Rouge Metro Airport by the Department of Administration, which oversees aircraft security and coordinates maintenance. Still, Stamey is a one-man shop of sorts, working within a budget which entails accounting for maintenance, supplies and flight logistics needs.

But it's that attention to detail, experience and training that has earned him status as the backup pilot to the pilots for the Louisiana State Police in their mission of flying the governor, Lt. governor and their staff. That need, in addition to short-notice flights involving sudden emergency response efforts, means that the aircraft must be ready to fly on short notice.

With the busy nature of state business, emergency response functions and environmental assessments that require a bird's eye view, it's a safe bet that LDEQ has a plane in the air somewhere at least three times a week or more.

DISCOVER DEQ
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY NEWSLETTER
December 2016 Issue Number: 59

LDEQ assists with placing 300 storm drain markers at Barksdale Air Force Base

Three hundred storm drain markers are now in place on the streets of Barksdale Air Force Base in Bossier Parish.

The initiative was launched by the base's environmental organization, the 2nd Civil Engineering Squadron/Civil Engineering Installation Management Environmental office. Amy Benitez, Barksdale's Storm Water Program Manager, contacted LDEQ Environmental Scientist Greg Waldron, who is a member of LDEQ's nonpoint source pollution unit, in search of markers to protect water quality on the base. "I was happy to assist her with her request," Waldron said. "We like to work with citizens to help them with water quality issues. It was also a pleasant surprise since I am a former member of the Air Force, though I was not stationed at Barksdale."

Working with LDEQ's nonpoint source pollution unit, a nonpoint source 319 grant through the U.S. Environmental Protection Agency was applied for and approved, which allowed Barksdale to receive the markers. Nonpoint source pollution refers to a pollutant that is not discharged from a point source such as a pipe, but is released from an area such as a field, street or parking lot.

Once approvals and funding were secured, some of the base's hazardous material/waste shops played a major role in purchasing and distributing the polyurethane adhesive needed to secure the discs to the concrete. The shops also handled proper disposal of empty tubes and used surplus product.

The drain markers were placed around the base on five separate occasions, the installation totaling about 14 hours of work. They were placed in areas that were highly visible and/or close to industrial facilities that have the potential to pollute. Those areas included industrial areas, residential housing in the historical section of the base and residential housing on the base's eastern side. Storm drains located in areas frequented by joggers and pedestrians were also targeted for marking.

"The 2nd Civil Engineering Section/Civil Engineering Installation Management Environmental office would like to thank LDEQ for supplying the storm drain markers through its grant program," Benitez said. "Without the supply of these medallions, it is unlikely that we would have been able to have the drain marker project approved. Thank you!"

Blue discs are attached next to storm drains to inform the public that illegal dumping can have a direct effect on the waterway.

Photo courtesy of Amy Benitez
Amy Benitez, Storm Water Program Manager at Barksdale Air Force Base, stands next to a storm drain with an affixed marker.

DISCOVER DEQ
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY NEWSLETTER

December 2016 Issue Number: 59

Lafayette Household Chemical and Electronic Waste Day, Dec. 10

The Lafayette Consolidated Government held a Household Chemical and Electronic Waste Day Saturday, Dec. 10.

LDEQ volunteers braved wind and cold temperatures to man the paint swap, taking used latex paint, mixing it with like colors and securing it in 5-gallon buckets for Habitat for Humanity. This go-round, 125 5-gallon buckets of reblended paint were rescued and given to Habitat to sell in their Restore.

“We are appreciative to each of them for sacrificing part of their Saturday to come out and assist us with this endeavor,” said Lisa Mahoney, recycling supervisor for the Lafayette Consolidated Government. “You guys are an instrumental part of our success and we are beyond grateful. …the 125 5-gallon buckets were “the most we have had since the inception of incorporating this element to our program.”

This event was for city of Lafayette and unincorporated parish residents only and was held in the UL Cajun Field Parking lot.

For more information on recycling, call Lafayette Consolidated Government Environmental Division at 337-291-5631.

River Birch Landfill makes energy out of garbage

Daniel Lee paces back and forth down a line of computer monitors. Located against one wall of an equipment-packed room the size of a 2-car garage, various screens display schematics, numerical data, flow rates, environmental information and cutaways of elaborate machinery. It looks like the control room of a nuclear reactor. It is a landfill gas system control room.

Gas collection points at River Birch landfill

Lee is Gas Systems Manager at River Birch landfill in Waggaman, on the west bank of Jefferson Parish just at New Orleans’ elbow. Like everything at this high tech landfill, the gas collection system is state-of-the-art, and it’s evolving all the time. A new control room is under construction right now. That project is expected to be completed in February. Right now, the gas system is manned by six people; three of whom are in the control room. It processes landfill gas generated by decaying debris and household waste the company collects in its five-parish service area which is delivered to Waggaman.

River Birch owner Fred Heebe said the key to the system is how the gas is collected. A combination of a synthetic cover and a minimum of two feet of clay are used to seal the landfill cells that are to be drilled for gas. “It’s really a final cover,” Heebe said. The strategy produces three big benefits: the landfill gas is contained, oxygen intrusion is reduced and odors are eliminated. It’s a win-win for the landfill and its neighbors.

Once that cover is in place, wells are drilled into the waste pile to collect the trapped gases. Heebe said the wells are spaced at 120-foot intervals and are sunk about 60 feet deep. The landfill has about 500 acres, he said, but not all that has been put in service. Eventually, more than 300 collection wells could dot the slopes of the landfill. When a layer of waste stops producing gas, it’s sealed and another layer is placed atop it, Heebe said. Then wells can be sunk in the new layer and that waste is exploited for gas, he said.

Continued on page 6

DISCOVER DEQ
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY NEWSLETTER
December 2016 Issue Number: 59

The gas processing plant at River Birch

The collection system feeds into the processing plant Lee runs. There is also a flare, but that is only used if the plant is not operational. “If you see that flare, our plant is down. We don’t want to flare,” Heebe said.

The gas delivered to the plant is not ready for sale, Lee said. It has to undergo dehydration, removal of impurities, chilling and pressurization to boost the pounds per square inch (psi) to a commercial standard.

One of the impurities, hydrogen sulfide (H2S) is removed by a bioreactor system that separates the H2S into its constituents – hydrogen and elemental sulfur. A high-tech filtration system using membranes separates the carbon dioxide from the gas. Thermal oxidizers destroy any volatile organic compounds stripped out of the gas. The remnant is “polished” by adding carbon, Lee said, and is a high BTU product. (A BTU is a British Thermal Unit used to measure the amount of energy in a source. One BTU is the amount of energy required to raise the temperature of one pound of water one degree Fahrenheit.) Lee said the system outputs gas at 300-500 psi and produces 3 million cubic feet of gas a day.

The finished gas leaves the plant and goes directly into an Atmos line. Lee said that system definitely turns a profit, even after the cost of construction and staffing costs. Heebe said that profit wasn’t the main reason River Birch got into the gas production business.

“It was the responsible thing to do,” Heebe said. He said that the plant produces enough gas to remove an equivalent of 200,000 cars off the road. “If this plant runs for 60 years,” Heebe said, “it’s going to take that many cars off the road. It will do that every year.”

DISCOVER DEQ
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY NEWSLETTER
December 2016 Issue Number: 59

Holiday Parties at DEQ

OSEC Holiday Party
December 15, 2016

OSEC Holiday Party
December 15, 2016

Legal Holiday Party
December 13, 2016

Legal Holiday Party
December 13, 2016

DISCOVER DEQ
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY NEWSLETTER

December 2016 Issue Number: 59

Who's Who At DEQ?

Reid Nuss – Environmental Scientist in Surveillance – Office of Environmental Compliance

Nuss earned a bachelor's in Coastal Environmental Science from LSU. Before coming to LDEQ, he worked at the LSU Aquaculture Research Station studying alternative dispersants for oil spill response.

Claire Lowe – Environmental Scientist in Permit Support – Office of Environmental Services

Lowe is originally from London, United Kingdom, and came to work in the U.S. as a Protected Species Biologist after getting her bachelor's degree in Marine Biology from the University of Wales. She has worked in Alaska, the Southern Ocean and New England as a fisheries biologist.

Lowe went on to earn a master's degree in Coastal Sciences from the University of Southern Mississippi and decided to move back to the South this year with her husband to avoid the New England winters.

Christopher Casteix – Environmental Scientist in Surveillance, Southeast Regional Office – Office of Environmental Compliance

Casteix was born in Metairie and grew up in and around New Orleans. He graduated from Jesuit High School in 2010 and was a varsity athlete. After Jesuit, he attended LSU where he was a member of Acacia Fraternity. At LSU, Chris received a bachelor's in environmental engineering. After graduation, he worked as an air quality consultant for Ramboll Environ.

Casteix recently moved back to New Orleans and is very excited to be working for LDEQ.

DISCOVER DEQ
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY NEWSLETTER
December 2016 Issue Number: 59

Louisiana Department Of Environmental Quality's Third Quarter Summaries

Third Quarter 2016 Enforcement Actions:
http://www.deq.louisiana.gov/portal/DIVISIONS/Enforcement/EnforcementActions.aspx

Third Quarter 2016 Settlement Agreements:
http://www.deq.louisiana.gov/portal/DIVISIONS/Enforcement/SettlementAgreements.aspx

Third Quarter 2016 Air Permits:
http://www.deq.louisiana.gov/portal/tabid/2922/Default.aspx

Third Quarter 2016 Water Permits:
http://www.deq.louisiana.gov/portal/tabid/2899/Default.aspx

Third Quarter 2016 Solid and Hazardous Waste Permits:
http://www.deq.louisiana.gov/portal/divisions/wastepermits.aspx