



Mississippi Department of Environmental Quality

# Environmental News

*The mission of the Mississippi Department of Environmental Quality is to safeguard the health, safety, and welfare of present and future generations of Mississippians by conserving and improving our environment and fostering wise economic growth through focused research and responsible regulation.*

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## 2018 Legislative Report

Gary C. Rikard, MDEQ Executive Director

The 2018 Legislative Session was a busy one for MDEQ. Our efforts were focused on making changes that will help the agency be more efficient and more responsive to those we serve, including the citizens of the state.



Working with regulated industry, specifically the Petroleum Marketers Association, we secured the passage of House Bill 813 which provides a mechanism to ensure our Underground Storage Tank (UST) program is adequately funded. The bill authorizes the creation of an advisory committee, much like the Title V advisory committee, that will make recommendations to the Commission on Environmental Quality about the fees necessary for operation of the program. At first blush it may seem odd that the regulated community would support legislation that would increase fees, but the Petroleum Marketers Association realized that it was in the best interest of underground storage tank owners to have a financially stable program to provide services such as operator training and oversight of soil contamination cleanups.

Senate Bill 2485 will allow the department to act more efficiently by not mandating that public hearings be held for all permits associated with a municipal solid waste landfill. Previously, the department was required to hold hearing on all permits associated with a municipal solid waste landfill, including air and stormwater discharge permits, even if a hearing was not requested. Solid waste management permits are generally issued on a ten-year cycle and other permits for a landfill are on a five-year cycle. There have been many instances where public hearings were held on the secondary permits that no one attended. The revision to the law, effective July 1, will allow MDEQ to forego public hearings on the routine air and water permits when a hearing is not requested. The goal is to increase the

efficiency of the permitting process and to save state resources by using staff time better. The changes will also make the secondary landfill permits consistent with all other industries and projects in Mississippi. Public hearings on solid waste management permits for landfills will continue to be conducted.

I am pleased to report that after not receiving any funds last year, the Legislature authorized \$5 million in bonding authority to be used for the wastewater State Revolving Fund (SRF) program. The SRF funds provide low interest loans to municipalities, counties, and authorities for wastewater infrastructure projects. The state receives approximately \$5 in federal grant funds for every \$1 the state provides, which is obviously a great return on investment. The bond bill containing the SRF authorization is House Bill 1649. The MDEQ appropriation bill (House Bill 1607) gave the agency slight increase \$30,242 over last year for a total appropriation of about \$10 million in General Funds. Although this amount is below the historical appropriations for MDEQ, we appreciate the legislators and other state leaders recognizing the value our agency and staff provide for the state.

All in all, I think we had a successful legislative session. I want to thank the Legislative Committee Chairs and the bill sponsors who played critical roles in our getting our bills passed and the legislative staff who worked closely with MDEQ to draft good bills. We again this year benefitted from the private organizations, individuals, and businesses who want MDEQ to succeed and appreciate the work we do. Mississippi benefits from the successful private-public partnerships we have fostered to balance environmental protection and economic development.

An example of the SRF program's impact: the expansion of the DeSoto County Short Fork Wastewater Treatment Facility that received a \$22 million low interest loan from MDEQ.



### Want to join enHance?

More information about the enHance program, including how to apply, is available at [www.enhance.ms](http://www.enhance.ms).

## MDEQ Recognizes 2018 enHance Members

MDEQ accepted nine renewal memberships into its enHance program for the 2018 class on April 5. The recognition was part of the annual workshop and awards luncheon held in Jackson including celebrating the program's tenth anniversary this year.



enHance is a voluntary stewardship program that recognizes committed environmental leaders who accomplish goals beyond their legal requirements. enHance is open to facilities, cities, counties, and other entities who are interested in the program, and applicants can choose from three tiers: Leader, Steward, or Associate.

"It is an honor to recognize these members that are actively striving to reduce their wastes, reduce their environmental impacts, and improve the quality of life in their communities. Their vision and leadership is to be commended, as their efforts result in both immediate and long-term benefits for the residents of our state.

"Cooperatively we are extremely proud of the members' accomplishments over the life of the enHance program and their benefit to the environment. The members' impact includes the recycling, reuse, and reduction of solid waste of 85,964 tons, a reduction of 274,226 pounds of hazardous waste, a reduction of 18 million MMBTU of energy, and a reduction of 251 million gallons of water," said Gary Rikard, MDEQ Executive Director.

The class of 2018 includes Leaders AKzo Nobel Pulp & Performance Chemicals Inc. (Columbus), Ark-EII Springs Leggett & Platt (Houlka), Baxter Healthcare (Cleveland), Columbus Air Force Base, Hunter Douglas (Tupelo), Northrop Grumman Corporation (Moss Point), Nucor Steel Jackson, Inc. and General Recycling of Mississippi, LLC (Flowood), and Super Sagless (Tupelo). The City of Hernando renewed its membership as a Steward.

More information and the members' accomplishments can be found [here](#).





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Top: Jay Moon, President of the Mississippi Manufacturers Association, addressed the enHance lunch.

Middle: Gary Ri-kard, MDEQ Executive Director, with Nick Harmon of Akzo Nobel.

Bottom: Gary Ri-kard with Brandy Abbott, Ark-Ell Springs.





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Top: Timothy Turner, Gary Ri-kard, Michael Blythe, and Mike Jago, Columbus Air Force Base.

Middle: Mike Robinson, Gary Ri-kard, Mike Berry, and Randy Dunnam, Hunter Douglas.

Bottom: Gary Ri-kard with Lewis Pedroza, Northrop Grumman.





Top: Gary Rikard with Nucor representatives Clay Burton and Brandon Wynn.

Middle: Gary Rikard with Robert Keltz of Super Saggless.

Bottom: Gary Rikard with Gia Matheny and Alderman Andrew Miller from Hernando.





Gary Rikard presented a plaque of appreciation to Mary Jean Gates for her indispensable efforts over many years to launch and maintain the enHance program.



### **EPA to Launch Hazardous Waste e-Manifest System**

EPA plans to launch its e-Manifest system on June 30 for hazardous waste management tracking purposes. Congress tasked EPA, in the Hazardous Waste Electronic Manifest Act of 2012, to develop an electronic system to track hazardous wastes and to collect fees to implement and support the system.

Beginning May 1, hazardous waste generators, transporters, and operators of treatment and storage facilities in Mississippi who wish to utilize the electronic system may register through the MyRCRAid Application located in RCRAInfo. Participation in the electronic manifesting system will require a CROMERR-compliant signature process (Cross-Media Electronic Reporting Rule).

Since oversight of the federal e-Manifest regulations are not delegable to the states, EPA is charged with collecting payments and overseeing compliance related to non-payment. However, MDEQ will oversee the management of the industrial user profiles for Mississippi in the electronic system.

Further information regarding e-Manifest system registration and requirements can be found by visiting the e-Manifest page at: <https://www.epa.gov/e-manifest> or contacting Krista Caron with MDEQ's Hazardous Waste Branch at (601) 961-5719 and [kcaron@mdeq.ms.gov](mailto:kcaron@mdeq.ms.gov).

## Restoration Project Update — Mississippi Aquarium

Overlooking the Gulf of Mexico and across from Jones Park in Gulfport lies the future home of the Mississippi Aquarium. The site is currently under construction and is scheduled to open in late 2019 or early 2020.

A portion of the Mississippi Aquarium is funded through a \$17 million RESTORE Act project that will be leveraged by the City of Gulfport for the construction of the Coastal Community Gallery Building. The Coastal Community Gallery Building is anticipated to be approximately 42,000 square feet, including tanks, and will serve as the primary aquarium building.



The Aquarium's mission revolves around three pillars—education, conservation, and community. Visitors will be able to experience a slice of Mississippi and the aquatic wonders of the Gulf. A million gallons of fresh and salt water covering 12 animal habitats will be home to over 70 species, including sharks, otters, alligators, birds, and dolphins.

The Mississippi Aquarium will not only contribute to the ongoing research on marine wildlife but also educate the community and visitors through compelling and exciting exhibits and programs of the highest standards. The campus plan layout includes unique galleries nestled into a natural greenspace, creating areas for guests to enjoy the animals in natural outdoor spaces. The Aquarium will also have a formal educational and outreach program to reach as many students as possible, both in the K-12 system, but also provide a hands-on living laboratory for university students and researchers alike.





Top: Barbara Viskup explaining the importance of clean water.

Bottom: Matt Carpenter and Collin Selman.

## WaterFest

MDEQ staff participated in Celebrate the Gulf at Arts in the Pass by bringing WaterFest water quality information and explaining other environmental issues to visitors. This event was held in Pass Christian on April 7.



## Draft Section 303(d) Public Notice and Hearing

The Draft 2018 Section 303(d) List of Impaired Water Bodies is available for public comment and review from April 10 until May 15. Comments will be accepted by mail or electronic submission until 5:00 p.m. on May 15. Additionally, a public hearing will be held to receive comments on the draft list on May 15 at 3:00 p.m. in the MDEQ Commission Hearing Room at 515 East Amite Street in Jackson.

Section 303(d) of the Clean Water Act requires the state to identify water bodies that do not meet one or more applicable water quality standards and for which Total Maximum Daily Load (TMDLs) are needed. Mississippi's Section 303(d) List of Impaired Water Bodies identifies impaired water bodies and establishes a priority ranking for such waters, taking into account the severity of the pollution and the uses to be made of the water bodies. The Section 303(d) listing requirement applies to water bodies impaired by point and nonpoint sources.

More information about the MDEQ TMDL program is available [here](#).





## MDEQ Hosting VW Trust Funds Public Meetings in April

MDEQ has scheduled three meetings in April to garner input from the public on the state's proposed mitigation plan that will spend funds allocated to the state from the Volkswagen Diesel Settlement.

Governor Phil Bryant has designated MDEQ as the agency to administer the state's portion of the funds (\$9,874,414 out of the \$2.9 billion Environmental Mitigation Trust) to implement air emissions reduction projects. The funds from the trust will be used to fund mitigation projects to replace older diesel emission sources with cleaner technology to reduce excess nitrogen oxide (NOx) emissions and improve air quality in Mississippi.

The first meeting was held April 11 in Jackson at MDEQ's office building.

The next two are scheduled for:

- April 18 at 1:30 p.m. at the Batesville Public Library, 206 Highway 51 North, Batesville, 38606.
- April 24 at 1:30 p.m. in the Public Meeting Room of the Bolton State Office Building, 1141 Bayview Avenue, Biloxi, 39530.

Each meeting includes an informational presentation from MDEQ staff and an opportunity for the public to provide input. The public can also submit input, find out more information, and sign up for an email distribution list at <https://www.mdeq.ms.gov/air/vw-mitigation-trust/>. The deadline to submit input is May 18, 2018.

Each of the states involved in the litigation will receive settlements based on the number of offending vehicles registered in that state. VW established the Mitigation Trust Fund, in part, to settle claims under the Clean Air Act that it sold vehicles with "defeat devices" designed to cheat emissions tests for its diesel vehicles.



First meeting in Jackson.

## MDEQ Assists with National Lake Assessment Survey

Every five years the U.S. Environmental Protection Agency (EPA) conducts the National Lake Assessment (NLA) survey. This national report provides information on the extent of lakes that support healthy biological condition and recreation, estimate how widespread major stressors are that impact lake quality, and provide insight into whether lakes nationwide are getting cleaner.

To gather the data, EPA enlists the assistance of the states and that includes MDEQ for lakes in Mississippi. From June until September of 2017, MDEQ staff collected aquatic macroinvertebrates (essentially visible water bugs) and water quality data from 14 lakes in Mississippi. These lakes were selected randomly by EPA and ranged in size from large reservoirs to privately-owned lakes. The data was sent to EPA for their analysis and should be available within a year.

More information about the program and the results from 2012 and 2007 can be found on EPA's website [here](#).



Photo of Little Eagle Lake in Humphreys County taken by MDEQ's Melody Chimahusky during NLA work in August of 2017.



## HHW Collection Events

Spring is a great time to clean out the house and garage and safely dispose of household chemicals. Household Hazardous Waste (HHW) collection days are happening all over the state for the next few months. Click on [MDEQ's calendar of events](#)

for listings of these opportunities. MDEQ's [Solid Waste Assistance Grants](#) provide funding for many of these locally-sponsored HHW events.



More information on household chemicals and how to dispose of them properly can be found [here](#).

## Jackson Metro E-Waste Collection Day

MDEQ is a sponsor once again of the e-waste collection event in Jackson on April 20. It will take place from 8:00 a.m. to 2:00 p.m. at the Mississippi Farmers Market, 929 High Street, Jackson (near the State Fairgrounds).

Accepted electronics include computers, fax machines, radios, televisions, cell phones, monitors, printers, scanners, DVD players, and electronic games. There is a \$2 fee for LCD monitors, a \$5 fee for other monitors, and a \$15 fee for televisions. These fees help pay for the proper handling of hazardous components contained in these devices.

The event is open to individuals and businesses, and all materials collected will be recycled.



### ***35 Million Years Down the Chickasawhay to be Broadcast in April***

MDEQ Geologist James Starnes participated in the Mississippi Public Broadcasting's (MPB) special *35 Million Years Down the Chickasawhay* which will be broadcast on April 26 at 7:00 p.m. and April 29 at 10:30 a.m. and 5:00 p.m.

MPB describes the program as follows: "Take a trip down the Chickasawhay River in southeast Mississippi and see why it is one of the most geologically important rivers not only in the state but also the world. Mark Puckett, Professor of Geology of the University of Southern Mississippi along with George Phillips, Curator of Paleontology at the Mississippi Museum of Natural Science, and James Starnes, Geologist at the Mississippi Office of Geology explain how the sediment and fossils in this river can describe the history of the entire planet and tell a story millions of years old."

A promotional video for the show can be viewed on MDEQ's YouTube channel [here](#).



MDEQ's James Starnes in the background during filming. George Phillips of the Mississippi Museum of Natural Science in the foreground.





## Cisterns, Water Wells, and Early Settlement in Mississippi

David T. Dockery III, RPG

Fresh water is Mississippi's most valuable natural resource not only in present day but also at the state's beginning. Reliable springs and shallow aquifers were important to early settlers and the locations of early towns. This was true for Silas Dinsmoor, who was the Choctaw Agent for Mississippi between 1802 and 1816. In 1811, Dinsmoor built an Agency house near present day Ridgeland near the intersection of Old Agency Road and the Natchez Trace right-of-way. This house measured 72 by 30 feet and was scandalously large for an Agency house of its time. To provide for the large water supply needed by the Agency's many guests, Dinsmoor dug a well in late 1811 and early 1812 to a depth of 172 feet in stiff Yazoo Clay hoping to find groundwater before abandoning the project as a dry hole.

Even if Dinsmoor had dug his well twice as deep, it would still have been dry, because the Yazoo Clay is as much as 400 feet thick in the Ridgeland area (Figure 1). The Agency later dug a cistern, an underground containment for rainwater, to supplement their water supply. Today, cisterns from old home sites dot the landscape of the Jackson Prairie across central Mississippi where the Yazoo Clay is thick (Figure 2). Similar cisterns are also on the Black Prairie and Flatwoods in northeastern Mississippi where the Cretaceous Chalk and Porters Creek Clay are thick. Albert Foster Crider in his book, *Geology and Mineral Resources of Mississippi* (1906, p. 24), reported that he knew of no wells that penetrated the Porters Creek Clay and estimated the thickness as 210 feet (the actual thickness is around 400 feet).

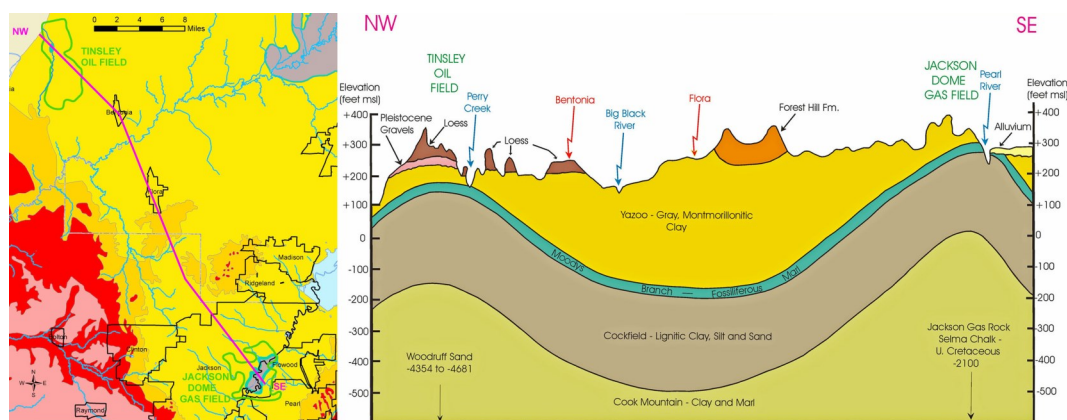


Figure 1. Line of cross section (left) and cross section (right) of the Yazoo Clay thickness between Jackson and Tinsley Dome/Oil Field in Yazoo County. Figure by David Thompson.



Figure 2. Cisterns along Kickapoo Road in northwestern Hinds County on the Yazoo Clay outcrop belt.

Cisterns were the water supply at historic Jefferson College established in 1802 at Washington in Adams County (Figure 3). The college was the birthplace of Mississippi's statehood in 1817. The large size of a cistern is not apparent at the orifice but only when looking at the expanded interior below. According to the *Natchez Democrat* (November 3, 2009), the branch director at Jefferson College, Robin Person, heard a "whomping" sound behind her house on the historic site on the night of October 30, 2009. Ten minutes later she heard it again but this time it shook the house. Outside she found a 12-foot wide hole and saw that the roof of a cistern had collapsed (Figure 4). It took 15 dump-truck loads of dirt to fill the cistern initially and another five loads after two weeks.



Figure 3. Cisterns at historic Jefferson College in Washington, Mississippi. Mary Dockery in the background. Pictures taken on August 16, 2011.

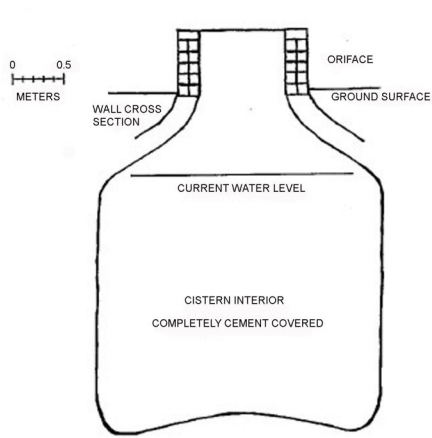


Figure 4. Jefferson College cistern diagram and collapsed cistern (from Robin Person).



Fortunately, modern well drilling technology allows the penetration of Yazoo Clay, Porter Creek Clay, and Cretaceous Chalk to access deep aquifers. Groundwater now supplies the needs of more than 90 percent of Mississippi's population and constitutes over 80 percent of all fresh water used in the state.

### Mississippi Partners in Preparedness Summit

MDEQ staff, including the agency's Dam Safety Division, will be participating in the Mississippi Partners in Preparedness Summit in Biloxi from May 7 to 10.

The event will be held at the Imperial Palace Resort, and information about registration is available [here](#).



The Dam Safety Division's display at the 2017 summit with MDEQ's Pacer Frierson.



## Adopt-A-Stream Workshop in June

The Mississippi Wildlife Federation, along with MDEQ, will hold a two-day Adopt-A-Stream workshop at Flint Creek Water Park near Wiggins on June 12 and 13 with an optional half day on June 14.

**Adopt-A-Stream** is a program that promotes environmental stewardship through training workshops, outdoor field activities and by introducing participants to watershed action projects.

The two-day program provides an in-depth study of watersheds, as well as hands-on training in chemical and biological parameters important to a healthy stream. In addition, the workshop will:

- Increase awareness of nonpoint source pollution
- Introduce surveying and mapping of your watershed
- Increase watershed protection awareness and possible actions that can be taken to help watersheds. A new model of *It Begins at Home* with ideas about projects such as:
  - Storm Drain Marking
  - Stream Clean-ups
  - Recycling
  - Advocacy and more

The half day added this year will concentrate on Black Creek, a Wild and Scenic River. A float trip has been planned to introduce participants to the stream's flora and fauna and to also do a watershed action clean-up project.

### Who Should Participate?

Educators, land managers, advocacy groups, Scout troop leaders, Envirothon Team advisors, watershed team leaders, environmental educators, concerned citizens and others. For teachers, two CEU credits are available for the two days and 2.4 for the two and a half days.

### Registration Information

Registration will be available on the Mississippi Wildlife Federation/[Adopt-A-Stream website](#) or by contacting Debra Veeder, Adopt-A-Stream Coordinator, at (601) 605-1790 or [dveeder@mswf.org](mailto:dveeder@mswf.org) for a registration form.





## MDEQ Environmental Action Links

- [Draft permits currently at public notice](#)
- [Environmental Permits Division scheduled public hearings](#)
- [Geology permit application public notice](#)
- [Permits and certificates issued in the last 90 days](#)
- [General permit coverages issued in the last 90 days](#)
- [Notices of Intent for coverage under a Statewide General permit received by the Environmental Permits Division](#)
- [List of the 401 Water Quality Certifications currently at public notice](#)
- [List of the compliance inspections recently conducted](#)
- [Orders issued by the Mississippi Commission on Environmental Quality](#)





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## Picture of the Month

Sioux quartzite  
cobble from Pre-  
loess gravels in  
Warren County.

Taken under a mi-  
croscope by Paul  
Parrish, Office of  
Geology.

