



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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Mississippi Department of Environmental Quality Environmental News

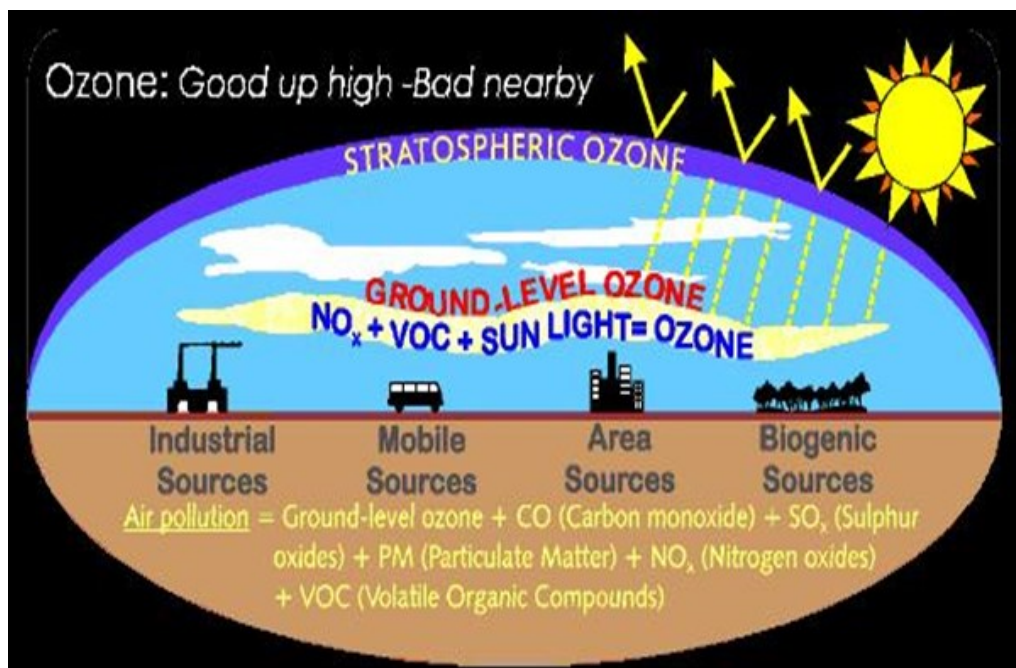
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MARCH 2018

MDEQ Ozone Daily Forecasts Begin April 1

The Mississippi Department of Environmental Quality (MDEQ) issues daily ozone forecasts from April 1 to October 31 for DeSoto County, the Jackson Metro area, and the Gulf Coast. These forecasts keep residents and industries apprised of the current ozone conditions and alert them if an Air Quality Action Day is forecast. These forecasts are updated and available daily via the [MDEQ website](#), [MDEQ Twitter](#) account, and [daily emails](#).

Air Quality Action Days are those days when ozone levels are forecast to exceed the standard, and for those days residents and industries can alter behavior to reduce air pollution. For individuals that includes carpooling, reducing idling, and postponing vehicle refueling and lawn maintenance until after 6:00 p.m. On these days sensitive groups, such as children and adults with asthma or lung disease, should reduce exposure by reducing prolonged or heavy exertion outdoors. Ground level ozone is not emitted directly into the air, but it is created by chemical reactions between oxides of nitrogen (NO_x) and volatile organic compounds (VOCs).



This happens when pollutants emitted by cars, power plants, industrial boilers, refineries, chemical plants and other sources chemically react in the presence of sunlight. Ozone at ground level is the main ingredient in "smog." Under the Clean Air Act, EPA establishes primary air quality standards to protect public health and secondary standards to protect public welfare that includes protecting ecosystems, plants, and animals. Currently, Mississippi is meeting all of these standards, or is "in attainment," for the current ozone standard which is 70 parts per billion (ppb).

Although Mississippi is meeting this standard, it is crucial that all areas of the state, especially DeSoto County and the Mississippi Gulf Coast, work cooperatively to maintain low ozone levels because four relatively high ozone days in a year could cause EPA to issue a

"nonattainment" designation to a violating area. Any area designated as nonattainment faces potential economic development constraints, including limits to industrial growth and transportation improvement, such as restrictions on highway expansion and development.

Developing plans cooperatively to meet air quality standards is the focus for the Mississippi Air Quality Action Groups. The groups, initially formed by MDEQ, cities, county agencies, industries, government agencies, and public interest groups, are stakeholder-led efforts to help citizens, businesses, and industries become aware of the issues and how they can be part of the solution. The groups develop outreach materials and plan promotional events to encourage air pollution reduction steps. These groups also work to develop efficient ways to notify residents and businesses about Air Quality Action Days.

The Mississippi Gulf Coast Air Quality Action Group and the DeSoto County Air Quality Action Group are recruiting new members. For more information, please contact Keith Head at KHead@mdeq.ms.gov and (601) 961-5577. For more information on the Air Quality Index or to join the forecasting email list, contact Rodney Cuevas at RCuevas@mdeq.ms.gov and (601) 961-5566.

Good 0-50	Air quality is considered satisfactory, and air pollution poses little or no risk.
Moderate 51-100	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.
Unhealthy for Sensitive Groups 101-150	Members of sensitive groups* may experience health effects. The general public is not likely to be affected.
Unhealthy 151-200	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
Very Unhealthy 201-300	Health alert: everyone may experience more serious health effects.
Hazardous 301-500	Health warnings of emergency conditions. The entire population is more than likely to be affected.

Restoration Update—Habitat Restoration and Conservation in Turkey Creek Project

MDEQ hosted a public meeting in Gulfport on February 27 to update residents on the Habitat Restoration and Conservation in Turkey Creek Project.

For many years Turkey Creek has been hampered by downed trees, log jams, and manmade debris. This \$6.1 million project is funded by the National Fish and Wildlife Foundation's Gulf Environmental Benefit Fund (GEBF) and seeks to conserve important habitat and enhance water quality in the Turkey Creek watershed through habitat and stream conservation and restoration. The GEBF was established using criminal penalties resulting from the *Deepwater Horizon* oil spill.

MDEQ has recently hired a contractor, Environmental Management Services, Inc. (EMS) of Hattiesburg and Gulfport, to collect survey, engineering and other data to determine the shape of the creek, the size of buffer needed to create a greenway, and needed restoration actions. Using this data, EMS will provide design plans and specifications for fish habitat creation and restoration as well as streambank stabilization.

Ultimately the project will use fee simple land and easement acquisition, focused in the lower reaches of the Turkey Creek watershed, to protect key wetland and riparian habitats. Restoration on these and other previously protected lands will include hydrologic restoration of wetlands, riparian buffers, invasive species management, debris removal and stream bank stabilization. The restoration efforts will maintain and improve water quality for Turkey Creek along with Bernard Bayou and the Back Bay of Biloxi.

MDEQ's Chris Wells addresses the public meeting in Gulfport on February 27.



MDEQ staff Caitlyn Atkins, Lynn Chambers (L-R), and Melissa Fortenberry (bottom).

Helping Girl Scouts Achieve

Several MDEQ staff recently volunteered their time and expertise to help Girl Scouts earn their engineering badges at Camp Wahi in Brandon. Using hands-on activities, these women helped the girls learn basic engineering principles such as momentum, kinetic energy, and friction in a fun environment.



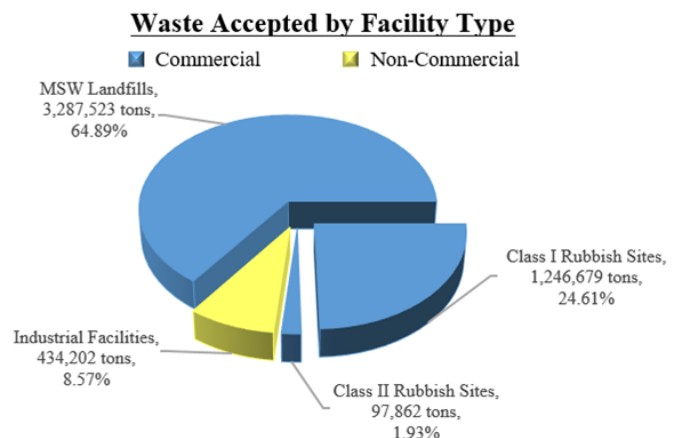
MDEQ Releases Annual Solid Waste Report

MDEQ's Waste Division has recently released the Status Report on Solid Waste Management Facilities and Activities. This annual status report summarizes and provides information on solid waste management and disposal activities that were conducted in Mississippi each calendar year. The report is based on information provided to MDEQ by the individual facility owners as required by state law and regulations and/or the facility operating permits. The most recent report for 2016 includes summary information on activities conducted by:

- Municipal Solid Waste Landfills
- Class I and Class II Rubbish Sites
- Industrial and Institutional Disposal Facilities
- Transfer Stations
- Land Application Sites
- Processing Facilities
- Composting Facilities
- Beneficial Use of Nonhazardous Solid Waste and/or By-Products
- Waste Tire Management

The solid waste information provided in the full report is used by local government officials and solid waste decision makers, disposal facility owners and operators, state agencies, and other organizations and individuals. An electronic version of the report can be found on the Solid Waste Facilities Reporting Program [webpage](#) for review by the general public as well as other members of the regulated community.

The 2016 report indicates that just under 5.1 million tons of solid waste was received for disposal at commercial and non-commercial landfills and rubbish sites. This total tonnage represents an increase of approximately 430,000 tons in total non-hazardous solid waste disposed in Mississippi in 2016 as compared to 2015. This 5.6 percent increase was primarily due to incremental increases in waste disposal at Municipal Solid Waste (MSW) landfills and commercial rubbish sites.



The annual report also indicates the tonnage of solid wastes managed at other types of solid waste facilities in 2016 as follows:

FACILITY	TOTAL TONS MANAGED
Transfer Stations	881,257
Land Application Sites	29,754
Processing Facilities	96,672
Composting Facilities	19,569

Additionally, the report indicates that a little over one million tons of industrial and other solid waste byproducts were distributed during 2016 for legitimate end uses through the MDEQ Beneficial Use program. Finally, the report shows that over 5.4 million passenger tires were managed in 2016, and approximately 90 percent of the waste tires generated within Mississippi were recycled.

Please visit the MDEQ Waste Division's Solid Waste Facilities Reporting Program [webpage](#) or contact Collin Selman at cselman@mdeq.ms.gov and (601) 961-5171 for additional information.

HHW Collection Events

Spring is a great time to clean out the 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](#).



MDEQ Seeks to Adopt Hazardous Waste Generator Improvements Rule

On November 28, 2016, EPA published the Hazardous Waste Generator Improvements Rule which became effective on May 30, 2017. Through this rulemaking, EPA has reorganized the hazardous waste generator regulations to make them more user-friendly and to provide better understanding among the regulated community. The Rule also provides some operational flexibility for very small and small quantity generators.

MDEQ is currently in the process of incorporating the Generator Improvements Rule into the Mississippi Hazardous Waste Management Regulations. In considering the adoption of these regulations, MDEQ is seeking public comment on these proposed revisions through April 10, 2018, and a public hearing on the action will be held April 10 at 1:30 in the Commission Hearing Room at MDEQ's Office at 515 East Amite Street in Jackson.

The Federal Generator Improvements Rule has the following fundamental elements:

1. The new rule provides flexibility to generators with two new rulemakings. The first allows for Very Small Quantity Generators (VSQG, formerly referred to as Conditionally Exempt Small Quantity Generators or CESQG) of hazardous waste to consolidate their waste at a Large Quantity Generator (LQG) provided that the hazardous waste remains in control of the same person (as defined within the regulations). By consolidating this waste, it will allow for eligible generators to manage the hazardous waste with other similar wastes in a more environmentally safe manner.
2. Very Small and Small Quantity Generators (SQG) of hazardous waste are also allowed one planned or unplanned episodic event per year without changing their regulatory status. The generator may also apply for a second event, but it may not be the same type of event as the first one. This change allows for regulatory flexibility without any detriment to human health and the environment.
3. The remaining revisions and corrections include provisions to improve environmental protection, to improve generator compliance, and to re-organize portions of the rule itself. These revisions to the regulations offer much-needed improvements including the following:

- The regulations for Very Small Quantity generators are now found in 40 CFR Part 262.

- The regulations are now separated by generator category (VSQG, SQG, and LQG along with regulations for accumulation at satellite areas) and include the requirements for hazardous waste management at satellite accumulation areas.
- The emergency planning and contingency planning provisions for both SQG and LQG were updated and clarified.
- The rule includes requirements for improved marking and labeling of hazardous waste containers and tanks that will help ensure protection of human health and the environment by easing the management of these units.
- The rule includes guidance on determining the generator category for the month for both non-acute hazardous waste and acute hazardous waste.
- Another revision is the requirement that hazardous waste determinations be accurate.

The adoption of these revisions is important for MDEQ to maintain the delegation from EPA to manage the Hazardous Waste Management Program in the State of Mississippi. For questions regarding the rule or the rule adoption process, contact Brad Justice in MDEQ's Waste Division at bjustice@mdeq.ms.gov and (601) 961-5064.

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.



Title V Hearing April 5

MDEQ's Air Division will hold a public hearing to receive comments regarding the proposed Title V Permit fee for September 1, 2018, through August 31, 2019. The hearing will be held on Thursday, April 5, at 1:30 p.m., in the Commission Hearing Room at MDEQ's offices located at 515 East Amite Street in Jackson. More information can be found [here](#).

Also, links to MDEQ's public notices and public hearings can be always be found on this [webpage](#).

Celebrate the Gulf and WaterFest April 7

MDEQ staff will be on hand for this fun event at War Memorial Park in Pass Christian on April 7 from 10:00 to 3:00. Find out more [here](#).



Saturday, April 7
10 a.m. - 3 p.m.

War Memorial Park
Pass Christian

WATERFEST
CELEBRATING AND PROTECTING MISSISSIPPI'S WATERS

Thank you to our sponsors

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY (MDEQ)
MISSISSIPPI POWER
U.S. ENVIRONMENTAL PROTECTION AGENCY

Mississippi Water Resources Conference

Several MDEQ staff will be presenting and in attendance at the 2018 Mississippi Water Resources Conference in Jackson. This annual conference is hosted by the Mississippi Water Resources Research Institute and will be held April 3 and 4 at the Jackson Hilton. Find out more [here](#) or contact Jessie Schmidt at jessie.schmidt@msstate.edu and (662) 325-3295.



Mississippi Beach Monitoring Program

It's almost beach time for residents and visitors to the Mississippi Gulf Coast. To keep the public informed of the condition of the waters along the beaches of the Coast, MDEQ leads a multi-agency task force that monitors the water quality at 21 stations. Water is tested for the presence of *Enterococcus* bacteria which is an indicator for bacteria pollution. MDEQ issues advisories when bacteria levels exceed water quality criteria and pose an increased risk to human health. When an advisory is issued, water contact should be avoided.

The [beach program's website](#) is updated with the issuing or lifting of advisories. The public can also be added to an email list and a texting group when advisories are issued or lifted. More details on how to sign up can be found [here](#). The information is also tweeted on the agency's [Twitter account](#).



enHance Workshop Scheduled for April 5

The enHance environmental stewardship workshop and awards luncheon in downtown Jackson will be held Thursday, April 5, beginning at 8:00 a.m. This annual event is sponsored by MDEQ and the Mississippi Manufacturers Association, and this year's workshop will celebrate the tenth anniversary of the program.

The workshop will provide information concerning the principles of environmental stewardship, lean manufacturing, waste reduction through best management practices, presentations, and case studies. The workshop is also a great opportunity to network with Mississippi's environmental stewardship leaders.

When: Thursday, April 5, 2018, 8:00 a.m.

Where: Jackson Marriott Downtown, 200 East Amite Street, Jackson, 39201.

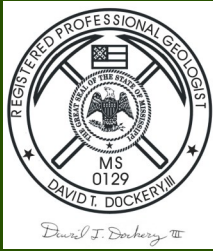
Register [here](#).

For more information about registration, contact Barbara Hopkins with MMA at barbara@mma-web.org and (601) 292-1125. For information about the workshop, contact Mr. Khairy Abu-Salah with MDEQ at KAbuSalah@mdeq.ms.gov and (601) 961-5284 or Mr. Mark Williams at mwilliams@mdeq.ms.gov and (601) 961-5304.

More information about the program is available at www.enhance.ms.



2017 workshop presentation from Nissan.



MDEQ "Rock Stars"

David T. Dockery III, RPG

MDEQ Geologists, or "rock stars," James Starnes, Jonathon Leard, and David Dockery were among the experts invited to the Mississippi Museum of Natural Science's 15th Annual Fossil Road Show on March 3. This

interactive event invites the public to bring in their finds to be identified by experts. And, sometimes the experts are surprised by what they're brought!



Figure 1. Gathering crowd at the 15th Annual Fossil Road Show with a jaw-dropping view of the fossil whale hung from the ceiling.

One of the experts, James Lamb, demonstrated to the public (including MDEQ's Chris Wells and his son) a 3D printer that replicates dinosaur bones (Figure 2). Lamb is vertebrate paleontologist and dinosaur expert and the Collections Manager and Curator of Vertebrate Paleontology and Natural History at The Black Belt Museum of the University of West Alabama. During his long, professional career he has worn out four field vehicles driving an estimated 750,000 miles collecting fossils.



Figure 2. Left, James Lamb explaining his 3D printer to Chris Wells and his son Nolan. Right, a father and son amazed while watching the 3D printer at work.



Figure 3. James Starnes (left) and Jonathon Leard (right) identifying fossils at the 15th Annual Fossil Road Show.

Two interesting rocks brought to the Leard-Dockery table to be identified were a fossiliferous chert pebble with fossil Foraminifera called fusulinids, and a cobble of amygdaloidal basalt, originally from the bedrock of Michigan, and brought south by glaciers and floating river ice (Figure 4).



Figure 4. Left, chert pebble with fossil fusulinid Foraminifera. Right, amygdaloidal basalt, possibly derived from the bedrock of Michigan.

Perhaps the find of most scientific value was that of an anthracothere molar found in the Byram Formation below the swinging bridge at Byram by Sara Yarbrough. Prior to this find there were only two other land mammal finds known from the Early Oligocene age Byram Formation, a *Metamynodon* skull and the jaw of a *Subhyracodon*. The first occurrence of *Anthracothere* in Mississippi only came to light a couple of years ago but was from younger Late Oligocene age sediments. So, this find also pushed the range of this genus even farther back than what was just previously known in Mississippi. Images of the molar and the fusulinids were later posted on MDEQ's social media accounts for #FossilFriday and #MicroscopeMonday respectively (Figure 5).

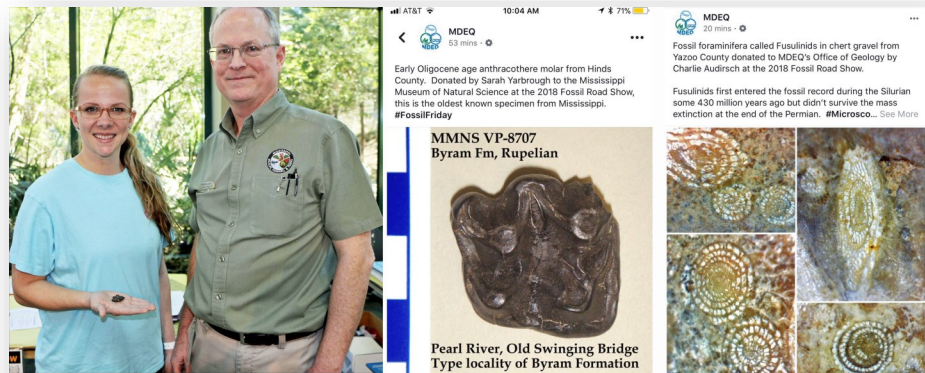


Figure 5. Left, Sara Yarbrough holding her anthracothere molar next to George Phillips of the Mississippi Museum of Natural Science. Middle and right, Fossil Friday post of the anthracothere molar and Microscope Monday post of the fossil fusulinids.

Vicki Lais, of the Birmingham Paleontological Society, brought the most interesting invertebrate fossils to the Fossil Road Show. These were tiny fossil mollusks from the Coon Creek Tongue of the Ripley Formation at the Blue Springs locality in Union County, Mississippi (Figure 6).



Figure 6. Left, the Birmingham Paleontological Society exhibit. Center, Vicki Lais. Right, tiny fossil mollusks and corals from the Coon Creek Tongue of the Ripley Formation at Blue Springs, Mississippi.

The Fossil Road Show is an annual event so be sure to check the calendar for next year and attend!



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

Little Eagle Lake in
Humphreys County.

Taken by Melody Chi-
mahusky, Field Ser-
vices Division.

