



# Mississippi Department of Environmental Quality Environmental News

VOLUME 12 ISSUE 3

MAR 2015

*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.*

## MISSISSIPPI AIR QUALITY ACTION GROUPS

Under the authority of the Clean Air Act, the U.S. Environmental Protection Agency (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 except for a portion of DeSoto County that EPA designated as part of the Memphis Ozone Nonattainment Area even though DeSoto County is meeting the current 75 parts per billion (ppb) standard. Harrison and Jackson Counties are in attainment for ozone, but they are close to the standard.

In December of 2014, EPA proposed new primary and secondary ozone standards in the range of 65 to 70 ppb, and it is expected that these standards will be finalized in October of this year. If those standards are adopted then it is likely that Mississippi will have more ozone nonattainment areas.

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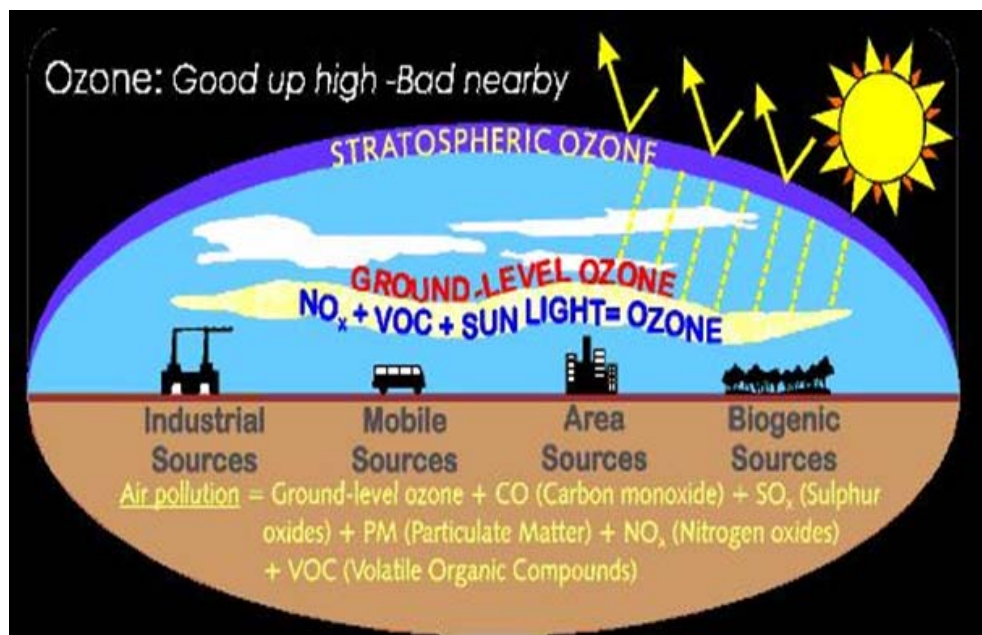
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<b>Good</b> 0-50	Air quality is considered satisfactory, and air pollution poses little or no risk.
<b>Moderate</b> 51-100	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people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

Any area designated as “nonattainment” faces potential economic development constraints including limits to industrial growth and transportation improvement constraints such as restrictions on highway expansion and development. Meeting these challenges and developing a plan to meet current and future air quality standards is the focus of each of the Mississippi Air Quality Action Groups. These 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 Air Quality Action Groups and the MDEQ are resolved to both protect air quality and to maintain healthy economic growth.

The groups are open to anyone who wants to attend. They are developing outreach materials and planning promotional events to encourage air pollution reduction steps. These include carpooling, vehicle idle reduction, and postponing vehicle refueling and lawn maintenance until after 6 p.m. These groups are also developing more efficient ways to notify residents and businesses on Air Quality Action Days. Air Quality Action Days are those days when ozone levels are forecast to exceed the standard.

MDEQ sends out daily air quality forecasts from April through October. These forecasts are available through MDEQ’s Twitter account (@MDEQ), an email list (to join contact Rodney Cuevas ([rcuevas@deq.state.ms.us](mailto:rcuevas@deq.state.ms.us)), and on the MDEQ website at <http://opc.deq.state.ms.us/aqi>.

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 Jerry Beasley with MDEQ at (601) 961-5134.

## STAFF CHANGES



### Valerie Alley

Valerie Alley was recently appointed as Chief of the Water Quality Assessment Branch within MDEQ's Field Services Division. The Water Quality Assessment Branch develops and maintains assessment tools, designs and plans monitoring activities, and analyzes surface water data collected by agency staff to determine the status of the state's waters under the Clean Water Act.

"I am honored to use my aquatic ecology background to continue to develop tools needed to accurately assess the status of the state's vast and valuable surface water resources. Accurate assessments provide the foundation for protection and restoration of these resources for current and future Mississippians," said Valerie Alley.

Valerie has been with the agency almost 11 years, most recently serving as the Clean Water Act Section 305(b) program coordinator for the Water Quality Assessment Branch. She is a native of Russellville, Alabama, and earned a B.S. in Biology from the University of North Alabama, and an M.S. in Biology with emphasis in Aquatic Ecology from the University of Louisiana at Monroe. Valerie and her husband Jimmy live in Rankin County and have two daughters.

### Dallas Baker

Dallas Baker has been appointed Air Director and Chief of MDEQ's Air Division. Baker has more than 21 years of experience as an environmental engineer with MDEQ and recently served as Chief of the Management Support Branch in the Environmental Permits Division. He has conducted PSD/NSR reviews for a number of projects, and has written Title V Operating Permits for energy, chemical, manufacturing and other air pollutant emitting industries.

*Continued on page 4*



“I began my employment at MDEQ with seven years in the Air Division, and it’s an honor to return in this new capacity. Much of the environmental public policy discussions at the national and local levels deal with air issues, and I am excited to be a part of that,” said Baker.

Dallas graduated from the University of Mississippi with a Bachelor of Science in Mechanical Engineering and a Master of Science in Environmental Engineering, and he earned an MBA from Mississippi College. He is a licensed Professional Engineer and is board certified by the American Academy of Environmental Engineers and Scientists. He serves on the Ole Miss School of Engineering Advisory Board as chair of the Geological Engineering Committee and is currently national President of the Air and Waste Management Association. Dallas is a native of Oxford, and he and his wife, Marla, live in the Reservoir area of Rankin County with their daughter and son.

## A&WMA WORKSHOP ON APRIL 21

The Air and Waste Management Association (A&WMA) Mississippi Chapter has scheduled a workshop, *What’s Happening Now in Air?*, to be held April 21<sup>st</sup> from 10:00 a.m. to 3:00 p.m. at 1020 Highland Colony Parkway in Ridgeland (Butler Snow). Topics include: new, proposed ozone standards; what to expect from an inspection; Title V news; and, more. For a copy of the flyer and more information regarding registration, costs, and other details, please email [aw-ma.mississippi@gmail.com](mailto:aw-ma.mississippi@gmail.com).



**AIR & WASTE MANAGEMENT**  
A S S O C I A T I O N

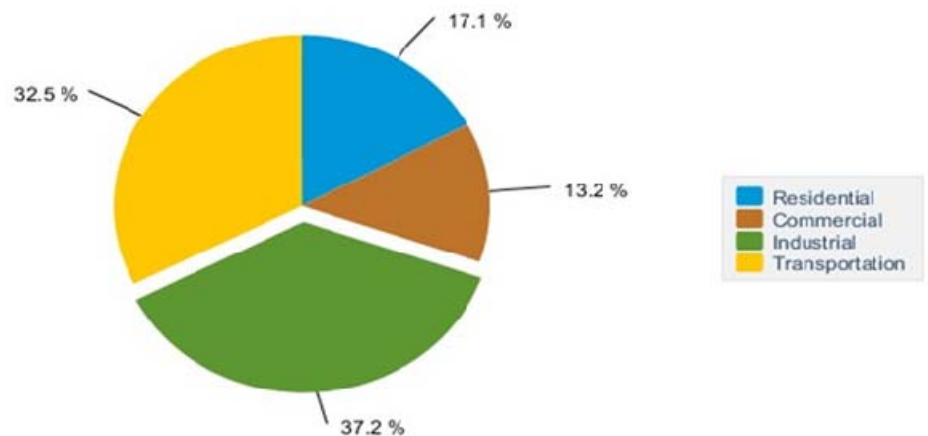
MISSISSIPPI CHAPTER  
SOUTHERN SECTION

## ***ENERGY SAVINGS OPPORTUNITIES* WEBINAR HOSTED BY ENHANCE**

The MDEQ enHance program sponsored a webinar, *Energy Savings Opportunities for Mississippi Industries*, on February 12. Participants were treated to presentations from multiple resources including the Department of Energy's Energy Efficiency Program, the Industrial Assessment Center, and the Mississippi Development Authority's Energy Division. A video of the webinar can be seen at <https://www.youtube.com/watch?v=SxtbPCEUp7M>.

At 421 trillion Btu, Mississippi industries are the largest energy consumer in the state.

**Mississippi Energy Consumption by End-Use Sector, 2012**



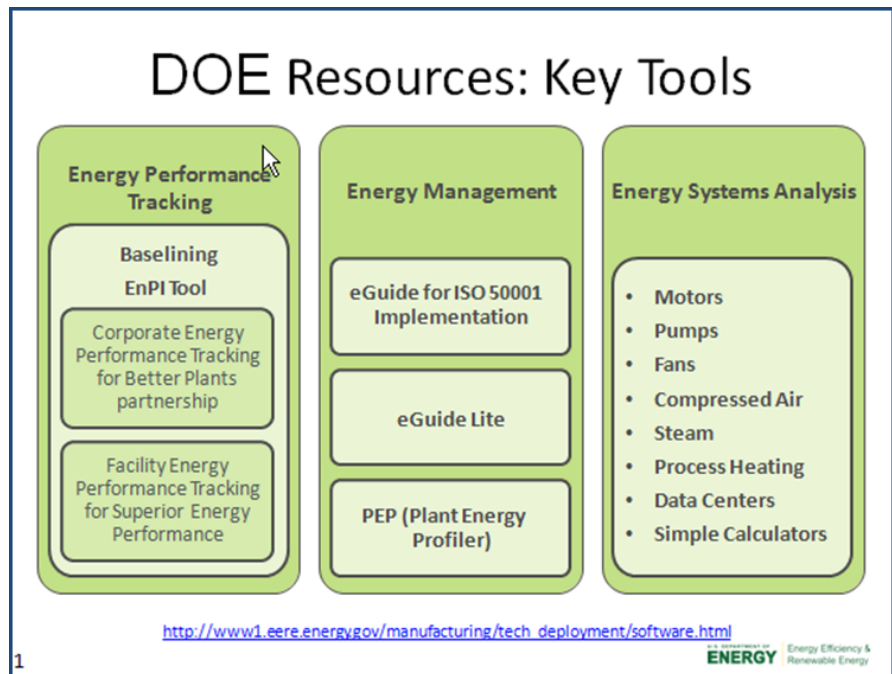
 Source: Energy Information Administration, State Energy Data System

Implementation of energy efficient equipment and procedures can reduce this usage, save money, and reduce emissions. The Department of Energy has many resources including software, best practices guides, and partnerships.



Facilities that join the DOE Better Plants Partnership have:

- ▶ Access to a **technical account manager** who can help establish an energy intensity baseline, refine metrics, identify energy saving opportunities, and introduce the company to tools and resources from DOE and other organizations.
- ▶ **In-Plant Trainings**, three to four day sessions that train multiple participants to identify and implement energy efficiency projects in major energy use systems.
- ▶ Access to the **full suite of DOE tools and resources** that help manufacturers maximize their energy productivity.



Further assistance is also available through state utilities. An Energy Efficiency Showcase highlighting the new programs being offered will be held on March 26 from 8:30 to 12:00 at the Jackson Convention Complex. Co-sponsored by the Mississippi Public Service Commission and the Mississippi Development Authority, this event is free and open to the public. To register for this event, go to <http://eeshowcase.eventbrite.com>. On-site registration will be available 30 minutes prior to the event.

For further information about assistance in reducing energy usage in industrial and commercial applications, contact Dallas Baker at [Dallas\\_Baker@deq.state.ms.us](mailto:Dallas_Baker@deq.state.ms.us).

**MMA**

Mississippi Manufacturers Association

The Voice of Industry since 1951

[www.mma-web.org](http://www.mma-web.org)

# enHance WORKSHOP

## enHance Workshop: Learn, Lead, Network, Profit

*“Sustainability through Compliance & Beyond”*

**L**earn how others are reducing energy usage, saving material and labor costs, and eliminating waste. Network with peers in manufacturing, consulting, and government to share best practices and improve operations. Meet the newest members of the enHance Stewardship program and learn why they are recognized as leaders.

- 8:00 a.m. **Registration**
- 8:30 a.m. **Welcome & Overview**; Dallas Baker, enHance Program
- 8:45 a.m. **Environmental Updates: What's New in Air**, Maya Rao and Sharon Killian, Trinity Consultants; **Handling Hazardous Waste – Avoiding the Top 10 Mistakes**, Cody Fisher, Mississippi Department of Environmental Quality; and **Using MDEQ's Website for Resources and Reporting**, Becky Nester, Mississippi Department of Environmental Quality
- 9:45 a.m. **Case Study: Plymouth Tube's Manufacturing Excellence Program**; Robert Zelinka, Plymouth Tube Company
- 10:00 a.m. **Case Study: E3 in Action – Profiting from the Economy-Energy-Environment Program**; Frank Schrum and Albert McShan, Cooper Tire
- 10:15 a.m. **Break**
- 10:30 a.m. **Implementing a Successful Sustainability Program: The Baxter Experience**; Rob Currie, Baxter Healthcare Corporation
- 11:00 a.m. **Energy Efficiency Trends for Commercial/Industrial Sectors**; Allie Harris, Schneider Electric
- 11:30 a.m. **Toward Zero Landfilled Waste - Viable Options in Mississippi**; Sedric Myers, Nexeo Solutions
- 12:00 p.m. **Update on Beneficial Uses for Wastes**; Mark Williams, Mississippi Department of Environmental Quality
- 12:15 p.m. **Final Questions & Session Wrap-up**
- 12:30 p.m. **Awards Luncheon**: Keynote Speaker Glenn McCullough; and Awards Presentation honoring 2015 enHance members; Gary Rikard, Director, Mississippi Department of Environmental Quality

### When & Where

#### ◆ **Thurs., April 16, 2015**

Jackson Marriott, 200 East Amite Street, Jackson; 601-969-5100.

### Suggested Hotel

◆ **Jackson Marriott**; A \$129 per night corporate rate is available. To make reservations, call 800-228-9290 and reference code "MSM" or "Mississippi Manufacturers Association". Deadline to receive this special rate is 6:00 p.m. Fri., March 20, 2015.

### Cost

◆ \$85 per person. Parking vouchers will be handed out by MMA.

### Schedule:

- ◆ **Registration** 8 to 8:30 a.m.
- ◆ **enHance Workshop** 8:30 a.m. to 12:30 p.m.
- ◆ **Awards Luncheon** 12:30 to 1:30 p.m.

### [REGISTER ONLINE NOW](#)

*Reminder notices will be sent a few days prior to the workshop. If you do not receive a reminder notice, or if you would like more information about this or other MMA seminars, contact Barbara at 601-292-1125 or [barbara@mma-web.org](mailto:barbara@mma-web.org).*

**About enHance:** The MDEQ enHance program is a voluntary initiative to recognize environmental leaders in Mississippi. Environmental leaders strive to reduce wastes and inefficiencies from operations, resulting in environmental and economic benefits. Visit the [MDEQ enHance website](#) for information on membership requirements and application forms. Applications for Membership are accepted annually from July 1- Sept. 30.



Mississippi Manufacturers Association

## MMA Seminar Registration Form

Seminar Name \_\_\_\_\_

Seminar Date \_\_\_\_\_ Seminar location \_\_\_\_\_

Name of Attendee(s) and job title(s) \_\_\_\_\_

Company Name \_\_\_\_\_

Company Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Attendee Phone Number \_\_\_\_\_

Attendee Fax Number \_\_\_\_\_

Attendee E-mail Address \_\_\_\_\_

**If different than above:**

Name of Person Submitting Registration \_\_\_\_\_

Job Title \_\_\_\_\_

Address \_\_\_\_\_

Phone Number \_\_\_\_\_ Fax Number \_\_\_\_\_ E-mail \_\_\_\_\_

**If different than above:**

Billing Contact \_\_\_\_\_

Address \_\_\_\_\_

Phone Number \_\_\_\_\_ Fax Number \_\_\_\_\_ E-mail \_\_\_\_\_

Job Title \_\_\_\_\_

**Return form and payment to:** Mississippi Manufacturers Association, P.O. Box 22607, Jackson, MS 39225-2607; fax (601) 948-6197. To pay by credit card, register online at [www.mma-web.org](http://www.mma-web.org).

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- ◆ No refunds without 48 hours cancellation notice! No refunds for no-show.
  - ◆ REMINDER NOTICES WILL BE SENT A FEW DAYS PRIOR TO SEMINAR DATE. If you do not receive a reminder notice, please contact Barbara at 601.292-1125 or [barbara@mma-web.org](mailto:barbara@mma-web.org).



## WHAT IS THE SMALL BUSINESS ENVIRONMENTAL ASSISTANCE PROGRAM?

The state Small Business Ombudsman (SBO) and the Small Business Environmental Assistance Program (SBEAP) were created under section 507 of the Clean Air Act Amendments of 1990. These programs serve the most productive yet vulnerable part of the economy—businesses that employ fewer than 100 employees. Beginning with the first comprehensive White House Report on the State of Small Business, and continuing through the most recent version, businesses that employ 20 or fewer people continue to produce 90 percent or more of all of the new jobs (those that never existed before) in the economy. This resilient and creative small business sector managed to retain and add jobs even in the midst of the recent recession. In the past, small businesses have been instrumental in the recovery of the economy from periods of recession and have provided a solid economic foundation. Small businesses that employ between 1 and 200 employees have been the largest driver in job growth in recessionary times.

Recent studies confirm that small businesses are substantially disadvantaged in complying with environmental regulations when compared to their large business counterparts. In addition, small companies are more likely to be negatively affected by regulations if they do not participate in the development of those regulations and therefore do not anticipate and plan for them. Often they lack the technical expertise to implement regulatory requirements, as well as the financial resources to pay for new technologies, processes, or retraining of employees. Small business owners who are not linked into government information networks may miss opportunities to comment on how regulations affect them. The federal Clean Air Act Amendments of 1990 recognized some of these vulnerabilities when it mandated each state and territory implement and include in its State Implementation Plan a three part Small Business Technical Assistance Program which we now commonly refer to as the Small Business Environmental Assistance Programs (SBEAP).

Mississippi's version is the Mississippi Small Business Environmental Assistance Program housed in MDEQ's Office of Community Engagement. This program responds to requests for technical

assistance for small businesses, develops mechanisms for assisting them in maintaining compliance, and uses outreach strategies to provide information and encourage small business participation. It also helps small businesses better understand and utilize MDEQ resources. The program is a cost effective way to support small businesses and is a model for how working cooperatively leads to government and business success.

The state programs provide: an Ombudsman to ensure access to timely information, including rules in plain language; technical assistance to understand how to comply with regulations; and a Compliance Advisory Panel, appointed by state governors and legislators, to ensure program accountability, assist with outreach and strengthen the government-small business owner relationship. Soon after their creation in the early 1990's, the *Wall Street Journal* called the SBEAPs the most effective programs in government at reducing emissions, building relationships, and encouraging business success.

In the 21 years since they were established these programs have developed effective, non-enforcement compliance assistance relationships with business owners in rural, suburban, and urban communities across the country. Businesses from California to Maine, and from the Virgin Islands to Iowa have partnered with their state SBEAP to help them protect their environment and comply with regulations while saving them precious time and expense that they can then focus on operating and growing their business. These state programs, many staffed by as few as one or two people, assist thousands of businesses annually and the demand for their services is continuing to increase as environmental regulation reaches further and further to reduce emissions.

For more information about the Mississippi Small Business Environmental Assistance Program, call 800-725-6112.

*Some information sourced from a 2011 Letter to EPA from Renee Lesjak Bashel, Chair, SBO/SBEAP National Steering Committee.*

## SMALL BUSINESS ENVIRONMENTAL ASSISTANCE PROGRAM TO HOST WORKSHOP FOR CHILDCARE FACILITIES

MDEQ's Small Business Environmental Assistance Program will host a free workshop for childcare facility owners and operators on Tuesday, May 19, 2015, at the Jackson Marriott Hotel, located at 200 East Amite Street in Jackson. As the result of an assistance request from multiple daycare centers using septic tanks or aerobic treatment units, the need for this workshop was evident to help facilities create safer, healthier environments for children to learn and grow.

**SAVE-THE-DATE**

**MAY 19, 2015**

### Empowering Childcare Centers for a Healthy Mississippi Workshop

Mississippi Department of Environmental Quality Office of Community Engagement will be hosting a **FREE** pre-conference workshop for childcare facility owners and operators in conjunction with the 7th Empowering Communities for a Healthy Mississippi Conference. This workshop is intended to help empower the childcare industry by improving knowledge and awareness of common environmental issues.



**REGISTRATION IS FREE!**



#### ENVIRONMENTAL ASSISTANCE WORKSHOP

**TUESDAY, MAY 19, 2015**

**JACKSON MARRIOTT DOWNTOWN**

**JACKSON, MISSISSIPPI 39201**

**10:00AM - 4:00PM**

REGISTER NOW BY CALLING:

**1-800-725-6112**

*Seating is limited to 50 participants*

*Licensed childcare providers can receive 5 contact*

MDEQ Office of Community Engagement  
Small Business Environmental  
Assistance Program

For more information contact  
Taaka Scott-Bailey at 601-961-5626  
[Tbailey@mdeq.ms.gov](mailto:Tbailey@mdeq.ms.gov) or  
Jennifer Carter at 601-961-5676  
[jcarter@mdeq.ms.gov](mailto:jcarter@mdeq.ms.gov)

## HUB CITY HUMANE SOCIETY AND DAVIS FAMILY RECEIVE EPA REUSE AWARD

On March 10, EPA presented the Region 4 Excellence in Site Reuse Award to Chuck and Gayle Davis, property owners, and the Hub City Humane Society for redeveloping the Davis Timber Superfund site in Hattiesburg. The award recognized their commitment to safely and sustainably reusing the former wood treating property after EPA and the State of Mississippi completed cleanup activities in 2012.

The Davises and The Hub City Humane Society worked cooperatively with EPA, MDEQ, and local partners to return the 30 acre Davis Timber Superfund site to productive use as a community-based animal shelter. In addition to an adoption center for dogs and cats, future plans include a horse shelter, education center, dog park, community garden, and nature trails. By reclaiming, restoring, and reinventing the site, this project illustrates how the reuse of Superfund sites can protect human health, advance environmental protection and return formerly unusable properties into valuable community assets.



Photo courtesy of WDAM-TV





## MDEQ PARTNERS WITH LOCAL GOVERNMENTS TO SPONSOR SPRING 2015 HHW COLLECTION EVENTS

MDEQ is providing grants and technical assistance to a number of local governments throughout the state to sponsor upcoming collection events for household hazardous wastes (HHW). Solid Waste Assistance Grants awarded by MDEQ to these communities will provide funding for the local HHW collection events. These collection events provide local options to properly and safely dispose of aerosols, corrosives, pesticides, herbicides, paints, used oil, batteries, automotive fluids, electronic wastes and other household hazardous materials. The events remove these hazardous materials from the municipal solid waste stream so they are not disposed in local landfills. Local governments that are planning to conduct HHW events that MDEQ is aware of include the following:

Community Sponsor	Planned HHW Event Date
City of Cleveland	April 11
Three Rivers SWMA/ City of Oxford	April 11
Three Rivers SWMA/Lee County	April 18
Harrison County	May 2
Madison County	May 16
Wayne County	May 19

The information listed above represents the best available information at the time of publication. These dates are subject to change and other community events may be added in the near future.

*Continued on next page*

Contact local city or county officials for more details on these events. Other counties, municipalities and solid waste authorities may apply to conduct HHW events by submitting a grant application by October 1 or April 1 of each funding year through MDEQ's Solid Waste Assistance Grants Program.

For more information on solid waste assistance grants or for a particular event, contact Luis Murillo or Denise Rodgers at 601-961-5171.



## MRC AWARDS GRANTS TO THREE SCHOOLS

The Mississippi Recycling Coalition (MRC) recently awarded grants to schools in Ackerman, Winona, and Southaven. The awards included a \$1,000 cash award and a complimentary one-year membership to MRC.

**Ackerman Elementary School** will use the grant to purchase recycling bins, bags for the recycling containers, and costs for transporting the recyclables to a recycling facility. The school plans to collect aluminum cans, plastic bottles, and mixed paper.

**Winona Elementary School** will purchase recycling bins which will be placed throughout the campus. Additionally, the school plans to have students, faculty and the general public in the area participate in the program collecting aluminum cans, plastic bottles, metal cans, and mixed paper.

**Southaven High School** will use the grant to expand the school's current recycling program efforts by purchasing additional recycling bins and expanding recycling collection. They collect paper, plastic, and aluminum. The school will also use a portion of the funds to promote recycling efforts during the school's Earth Day clean up event in April.

# Jackson Business Electronics Waste Collection Day

**Friday, April 24, 2015**

**8:00 AM - 2:00 PM**

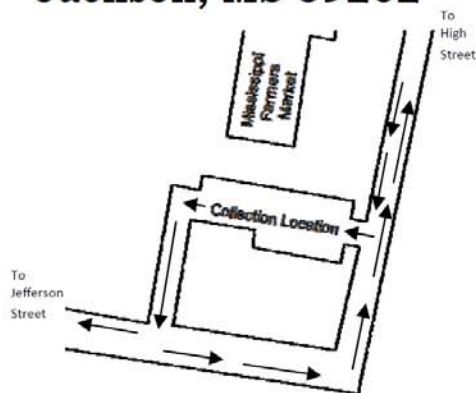
at:



**MISSISSIPPI FARMERS MARKET**

**929 High Street**

**Jackson, MS 39202**



## Contact Info

### Greater Jackson Chamber Partnership

Ms. Niki Carr Lowery  
(601) 948-7575, ext. 234  
nlowery@greaterjacksonpartnership.com

### Keep Jackson Beautiful

Ms. Marsha Hobson  
(601) 366-4842  
keepjack@bellsouth.net

## Acceptable Items

Computers, Desktop Copiers, Computer Components, Fax Machines, Radios, Televisions, Cell Phones, Desk Phones, VCR Players, DVD Players, Electronic Games, Monitors, Keyboards, Printers, Laptops, Scanners, and Stereos/Radios

**\$5 Fee for Monitors**

**\$15 Fee for Televisions**

**No cost for other items!**

## Event Guidelines

- Only Materials listed above will be accepted.
- All traffic in the drop-off area is **one-way only!** Please see diagram to the left.
- A fee will be charged to those recycling televisions and monitors to help pay for the proper handling of hazardous components such as lead and mercury contained in these devices.
- For your safety, stay in your vehicle as event staff unload the materials.
- Large loads may be redirected to Magnolia Data Solutions for unloading.

## Sponsored by:





## ADOPT-A-STREAM JUNE 16 TO 17

The Mississippi Wildlife Federation and MDEQ will hold a two-day Adopt-A-Stream workshop at John W. Kyle State Park near Sardis on June 16 and 17, 2015.

**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 a watershed.
- Increase watershed protection awareness and possible actions that can be taken to help a watershed. A new model of *It Begins at Home* has ideas for projects such as:
  - ▶ Storm Drain Marking
  - ▶ Stream Cleanups
  - ▶ Recycling
  - ▶ Advocacy and More

### 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.

### Registration Information

Registration is available on the Mississippi Wildlife Federation/ Adopt-A-Stream website: [www.mswildlife.org/AAS/](http://www.mswildlife.org/AAS/), 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.





## 2015 GEM AND MINERAL SOCIETY ROCK SHOW AND FOSSIL ROAD SHOW

David T. Dockery III, RPG, Office of Geology

The Mississippi Gem and Mineral Society's (MGMS) 56<sup>th</sup> Annual Rock Show at the Trade Mart Building in Jackson on February 28 and March 1 and the 12<sup>th</sup> Annual Fossil Road Show at the Mississippi Museum of Natural Science on March 7 were opportunities for geologists and paleontologists to meet the public and see their rock and fossil finds. At this year's Rock Show the traveling exhibit of a table set with stone food, or at least stones that looked like food, was back. The table exhibit originated with Bill and Lois Pattilo of the Gulf Coast Gem and Mineral Society in Corpus Christi, but recently the Pattilos retired from exhibiting and passed the torch and exhibit on to others. My favorite from the table this year was the slice of key lime pie (Figure 1).



Figure 1. George and Judy Johnson of Michigan at left view a table set with appetizing-looking stones, including the slice of chrysoprase key lime pie at right. Mississippi Gem and Mineral Society Rock Show, February 28, 2015.

Geology departments from the University of Mississippi, the University of Southern Mississippi, and Mississippi State University were represented at booths staffed with students and professors as was MDEQ's Office of Geology (figures 2-3). The Office of Geology booth gives MDEQ geologists the opportunity to share the agency's work and to see what rocks and fossils the public has found lately. It is also a chance to see other MDEQ employees fascinated with rocks and fossils (Figure 4).



Figure 2. State geology departments were represented at the 2015 Mississippi Gem and Mineral Society Rock Show. At left is the University of Mississippi booth (Dr. Terry Panhorst in blue shirt); at right is the University of Southern Mississippi booth. Pictures were taken on February 28, 2015.



Figure 3. At left is the Mississippi State University booth and at right is the MDEQ Office of Geology booth with swim team champion Abby Starnes and her dad James Starnes and Tyler Berry. Pictures were taken at the Gem and Mineral Society Rock Show on March 1, 2015.



Figure 4. MDEQ staff visiting the Rock Show; at left, Wayne Stover, center, with wife Ginger and former Office of Geology geologist Dr. James May, and, at right, Lyndsey Henley, center, with husband Eames and sister-in-law Virginia. Pictures were taken on February 28, 2015.



The two most puzzling finds examined were a fossil whale vertebra (Figure 5) from the Homochitto River in southwestern Mississippi, a place where only plant fossils and fossil land mammal bones had been found before, and the internal mold of a large pholid marine clam (Figure 6) dredged deep from the Mississippi River. The clam internal mold must have come from bedrock as it showed no wear from rolling down the river, but the matrix was like that of other fossil molds from the Tombigbee Sand at Plymouth Bluff on the Tombigbee River near Columbus.



Figure 5. The first of two puzzling finds presented to the Office of Geology booth was a fossil whale vertebra found by DeAnna Blailock and shown by her daughter Estelle Walden at left, from the Homochitto River in southwestern Mississippi. Pictures were taken on February 28, 2015.



Figure 6. The second of two puzzling finds presented to the Office of Geology booth at the Rock Show was this internal mold of a large pholid marine clam as held by Kathy Blackwell at left. The matrix appears to be from the Cretaceous Tombigbee Sand, but the specimen was given to Kathy by an Arkansas cousin, who was given two such specimens by a man who said he dredged it really deep from the Mississippi River. Pictures were taken on February 28, 2015.

The Fossil Road Show at the Mississippi Museum of Natural Science on the following Saturday was attended by over a thousand visitors, some coming to look and others bringing their rocks and fossils to be looked at. University of Mississippi professors Brian Platt and Lou Zachos helped with the identification process, as did Gary Stringer, professor emeritus of the Department of Geosciences, University of Louisiana Monroe (Figure 7, left). Platt is new to the Ole Miss faculty and is an expert in trace fossils such as tracks, trails, and burrows. Zachos is an expert in fossil echinoids, such as heart urchins and sanddollars. Stringer is an expert in otoliths, calcium carbonate structures in the inner ear of fish sensitive to gravity and linear acceleration.



Figure 7. At left Brian Platt and Lou Zachos of the University of Mississippi Geology Department talk with fossil otolith expert Gary Stringer. At right Abby Starnes, her dad James Starnes, and Tyler Berry and his nephew visit James' fossil identification table. Pictures were taken on March 7, 2015.

MDEQ was represented by tables manned by James Starnes (Figure 7) and David Dockery. Interesting finds brought to the Fossil Road Show include the fossil trilobite found by Kyrie Spooner (Figure 8) and the 13-inch long bill of the extinct fish *Cylindrocanthus* from the Cane River Formation in Louisiana found by Guy McLain (Figure 9, left). New at the Fossil Road Show this year was the painting of fossils by the Museum's illustrator Sam Biebers. His water color of the fossil ammonite *Menabites (Delawarella) danei* from the Coffee Sand at Mantachie, Mississippi, looked better than the actual fossil (Figure 9, right).





Figure 8. At left, Kyrie Spooner holds the external mold of a trilobite tail she found in chert gravel. At right is a closeup of the fossil and on the reverse side the stone is labeled with the collector's name and date. Pictures were taken on March 7, 2015.



Figure 9. At left, Guy, Josh, and Katie McLain hold a 13-inch-long specimen of the genus *Cylindrocanthus*, which is believed to be the rostral bill of an extinct fish species from the Cane River Formation in Louisiana. At right Sam Biebers paints a fossil ammonite *Menabites (Delawarella) danei* from Mantachie, Mississippi, at the Fossil Road Show. Pictures were taken on March 7, 2015.

## MDEQ ENVIRONMENTAL ACTION LINKS



- Draft permits currently at public notice, <http://opc.deq.state.ms.us/publicnotice.aspx>.
- Permits and certificates issued in the last 90 days, [http://opc.deq.state.ms.us/report\\_permits.aspx](http://opc.deq.state.ms.us/report_permits.aspx).
- General permit coverages issued in the last 90 days, [http://opc.deq.state.ms.us/report\\_gnp\\_issued.aspx](http://opc.deq.state.ms.us/report_gnp_issued.aspx).
- Notices of Intent for coverage under a Statewide General permit received by the Environmental Permits Division, [http://opc.deq.state.ms.us/report\\_gnp\\_notice.aspx](http://opc.deq.state.ms.us/report_gnp_notice.aspx).
- List of the 401 Water Quality Certifications currently at public notice, [http://opc.deq.state.ms.us/report\\_wqc\\_public\\_notice.aspx](http://opc.deq.state.ms.us/report_wqc_public_notice.aspx).
- List of the compliance inspections recently conducted, [http://opc.deq.state.ms.us/report\\_eced\\_tasks.aspx](http://opc.deq.state.ms.us/report_eced_tasks.aspx).
- Orders issued by the Mississippi Commission on Environmental Quality, [http://opc.deq.state.ms.us/report\\_orders.aspx](http://opc.deq.state.ms.us/report_orders.aspx).

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## PICTURE OF THE MONTH

Recent Snowstorm in  
Montgomery County

Taken by Reese Yontz,  
Environmental Permit  
Division

