



AIR & WASTE MANAGEMENT  
ASSOCIATION

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West Michigan Chapter  
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# WEST MICHIGAN ENVIRONET

A Newsletter of the West Michigan Chapter of the Air and Waste Management Association

Volume No. 5 Issue No. 5

Fall 1998

## AN OZONE SUMMARY: What the New Standards Could Mean for Michigan

by Jim Haywood, Earth Tech

Ozone... This quirky little oxygen molecule, which used to be confined to discussions in chemistry class, has become a household word. A normal oxygen molecule is comprised of two oxygen atoms (O<sub>2</sub>). When volatile organic compounds (known as VOCs) are subjected to oxides of nitrogen (NO<sub>x</sub>) and solar energy, an oxygen molecule containing three oxygen atoms (O<sub>3</sub>) is formed. Formation of this unstable ozone molecule continues as long as the photochemical reaction provided by the sun's energy is sustained. Significant ozone formation is diminished during periods of weak solar energy such as cooler months or night time conditions.

When formed in the upper atmosphere, ozone provides a natural filter to harmful solar ultraviolet radiation. But at ground level, high levels of ozone is a respiratory irritant which is especially dangerous to older adults, children, asthmatics, and persons with existing respiratory conditions.

For years, the U.S. Environmental Protection Agency (EPA) has maintained a 1-hour average national ambient air quality standard (NAAQS) of 0.12 parts per million (ppm) for ozone. Any area which did not exceed this standard more than three times during a rolling three-year period was considered to be in "attainment" with the standard. If the area failed to meet this standard, it was classified as "non-attainment". An ozone non-attainment status means severe restrictions for any new or modified major source of VOC and/or NO<sub>x</sub> emissions. All Michigan counties, with the exception of Allegan and Muskegon Counties, are considered to be in attainment with the one-hour standard of 0.12 ppm.

On July 18, 1997, the EPA finalized a new NAAQS for ozone. The new ozone standard, 0.08 ppm, will be compared to the rolling 3-year average of the 4th highest 8-hour average. Non-attainment designations with respect to the new 8-hour standard will be made in the year 2000 using monitoring data from 1997-1999. A State Implementation Plan (SIP) to bring non-attainment areas to attainment status will be due in the year 2003. Any area currently classified as non-attainment for the 1-hour ozone standard must demonstrate attainment for the 1-hour average and the new 8-hour average standard before it can be re-designated as attainment.

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## East Michigan Chapter to hold Fall Conference

On Monday, December 7th, the A&WMA East Michigan Chapter will hold their annual fall conference, titled "Risky Business." The conference theme is risk communication - how to communicate issues of risk to the public and to communities. The morning session will feature presentations and a panel discussion by representatives of industry, government and the environmental community.

David Ulrich, the new EPA Region 5 Director will address the conference at lunch.

Afternoon breakout sessions will address current issues in the areas of air, cross media, and remediation. The breakout sessions will be followed by a panel discussion on the topic of Environmental Justice. The panel participants will be from EPA, the environmental community, the Michigan Department of Environmental Quality, the regulated community and the media.

The conference will be held at the Kellogg Center on the campus of Michigan State University. For further information on the conference or conference registration, contact Betty Locey, Conference Chair, at (248) 488-1177.

## MDEQ to Hold MAERS Training Sessions

The Clean Air Assistance Program of the Environmental Assistance Division, Michigan Department of Environmental Quality, is sponsoring statewide training sessions to inform companies about a new emissions reporting system, the Michigan Air Emissions Reporting System (MAERS). This system will replace the Michigan Air Pollution Reporting (MAPR) forms. The new system will go into effect for the 1998 reporting year. In January 1999, facilities will be asked to report their emissions by March 15, 1999, using the new system. The training will include a discussion of the new system, a comparison of old forms to the new system, a demonstration of the software, and examples. Cost: \$50 includes continental breakfast, lunch, and workshop materials.

### Registration Contact:

DEQ Environmental Assistance Center  
1-800-662-9278.

### Information Contact:

Rebecca Smalldon  
Environmental Assistance Division  
517-335-2397

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***AN OZONE SUMMARY: What the New Standards Could Mean for Michigan***

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Although 1999 data needs to be included before the official attainment designations are made, the MDEQ has analyzed the data from 1996, 1997 and 1998 to give an idea of where the issues will be. Out of a total of 25 different monitoring sites statewide, 14 monitoring locations had 4th highest readings above the new ozone standard averaged over the past three years. This includes sites along the lakeshore at Coloma, Holland, Muskegon, Ludington, and Frankfort. The maximum 4th highest reading of all monitors in 1998 occurred in Holland at 0.06 ppm. Monitors in areas outside of Grand Rapids (Jenison, Grattan Township) where the new ozone standard was not exceeded with the 4th highest reading, these readings were above 0.07 ppm and the three-year average is very close to the limit. Unless we have an unusually cool summer next year, it is apparent that most of Michigan south of a line from Muskegon to Port Huron will be designated non-attainment, as well as areas along the Lake Michigan lakeshore up to Traverse City.

Aside from the politics of interstate ozone transport, studies have indicated that many individual activities generate a significant percentage of local ozone-causing pollutants. Many recorded violations of the ozone standard occur during weekends when industrial sources are either shut down or operating at a reduced capacity. While we can't control hot weather, we can reduce the amount of VOCs which enter the atmosphere on days when there is a high probability of ozone development. This realization led to the formation of "Ozone Action Days," a voluntary emissions reduction initiative that looks to the individual (as well as industry) to reduce VOC emissions during high probability days. Such reductions include not refueling until after 7 PM, avoiding gasoline powered equipment (gas mowers, outboard motors, etc.), grills which don't require lighter fluid, and so forth.

Although we have come to the close of the 1998 ozone season and subsequent Ozone Action Days, we must stay aware of what the future holds for West Michigan in terms of ozone regulations. For individuals, future vehicle testing will almost be a certainty with other activity curtailments possible. Be vigilant and active in tracking state and federal regulations. New or modified industries which will emit large amounts of VOCs or NOx (i.e. over 100 tpy for new sources; over 40 tpy increase for existing major sources) will be affected. Permitting such facilities should be done prior to re-designation else be subjected to mandatory pollutant removal systems and emissions offset trading.

Internet information for ozone related issues can be obtained from:

Michigan: [www.deq.state.mi.us/aqd](http://www.deq.state.mi.us/aqd)  
EPA Region V: [www.epa.gov/ARD-R5/naaqs/o3info.htm](http://www.epa.gov/ARD-R5/naaqs/o3info.htm)

**Emissions Trading in Michigan**

*by Amy Van Kolken, The AirBank*

Compliance with Michigan's air quality regulations can be challenging. Strict limits on emission rates and mass emissions may require sources of volatile organic compound (VOC) emissions as small as three tons per year to comply. Compliance with the State regulations also restricts operational flexibility that can result in forgone business growth opportunities.

Unlike other compliance options, the use of air emission credits can be implemented expeditiously. When utilizing a third party broker, the transfer of emission credits from the credit generator to a credit user can be completed within a matter of hours. The Michigan Department of Environmental Quality (MDEQ) then has up to thirty (30) days to complete a review of the information and to notify the company that the intended credit use is acceptable. It can take months, even years, to install and test abatement equipment or find alternative coatings, which can jeopardize compliance. Obtaining a variance or alternative emission limit from the state and federal regulatory agencies is another option, albeit resource intensive and time consuming, usually taking a year or more to complete. Moreover, regulatory agencies are extremely reluctant to grant such variances where all reasonable options have not been exhausted.

Recently, five VOC emission trades were conducted in Michigan for compliance with state regulations. These trades, totaling fifty tons VOC, utilized credits generated by five companies which all voluntarily over-controlled their emissions. These surplus emission reductions were generated primarily by switching from solvent-based coatings to water-based coatings or powder coat systems. Another credit supplier distributed lower-VOC producing gasoline in the Detroit area.

Two companies, both automotive parts suppliers, are using credits to comply with their annual tonnage limits specified in their permits. These limits require the companies comply on a twelve-month rolling average basis. The companies experienced production and quality painting problems, which required an additional coating on many parts. Additional production time each day was necessary in order to meet shipping schedules to the automotive manufacturers. Information needed to calculate the amount of credits needed includes: total gallons of paint and solvent used, VOC content of materials, if any, and the mixture as applied, on a daily and monthly basis. The monthly emissions are then added to the previous eleven months and averaged over the twelve-month period. The allowed twelve-month average is subtracted from the actual twelve-month average. The difference is what is covered by the use of credits.

Another two companies are using the credits to comply with pound VOC per gallon coating limits as specified by state rule and permit conditions. One

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## EESS Gearing Up for '98!

What is EESS? EESS (Environmental Engineering Student Society) is a Michigan State University student organization open to all undergraduate and graduate students pursuing a degree in an environmental related field. EESS provides an informal atmosphere to meet with Civil and Environmental Engineering Faculty. They are affiliated as a student chapter of A&WMA and the Water Environment Federation. EESS hosts professionals from industry and local and federal government to speak about their various environmental experiences.

EESS participation in national and regional events includes: presenting and sponsoring two student posters at the 1998 June A&WMA Annual Meeting in San Diego. The posters won first and third place. The first place went to Karen Ellis, Eric Gray, Matt Darr and Donna Cervelli for their "Lead in the Dorm Drinking Water" project. Those students also won the bachelors-level student paper competition for the American Water Works Association. The third place student poster award in San Diego went to Heather Merek and Luke Smith for "Economic Model of Abrasive Blasting." A&WMA also awarded EESS as the national Outstanding Student Chapter.

The chapter has sponsored trips to Dow Chemical in Midland and the East Lansing Wastewater Treatment Plant. Upcoming trips are planned to Dart Container's recycling operation in Mason and Lacks Enterprises plating in Grand Rapids. The student program committees organize activities such as Résumé Books, Intramural Sports Teams, and a number of social events. Community projects include Environmental Assessments for MSU, 8th Grade Poster Contest, Girl Scout Day, and Girls Too Engineering Conference.

EESS also sponsors MSU's Waste-Management Education and Research Consortium (WERC) team. In the WERC, students are presented with a real life environmental problem in a national competition

For more information on EESS contact:

Heather Marek at marekhea@pilot.msu.edu.

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## MDEQ Introduces First Environmental Assistance Division Field Staff

The Michigan Department of Environmental Quality (MDEQ) has announced the first Environmental Assistance Division (EAD) field staff. The three new staff will be focusing primarily on pollution prevention program issues. Coverage for western Michigan is split by two staff. The area north of Big Rapids is covered by Pat Donovan from the Cadillac Field Office. The Big Rapids area and south is covered by Maggie Fields in the Plainwell District Office.

A principal assignment of these staff will be to develop and implement a new partnership with local environmental and health departments to promote pollution prevention. Field staff will also work on assisting DEQ district staff in integrating voluntary pollution prevention into district activities. This includes programs such as the Clean Corporate Citizen, the Michigan Business Pollution Prevention Partnership, and the environmental audit.

MDEQ expects the new staff to be an important asset to district offices in implementing and promoting pollution prevention and environmental assistance programs.

The contact number for Pat Donovan from the Cadillac District Office is (616) 775-3960. Maggie Fields can be reached in the Plainwell District Office at (616) 685-0027. EAD also maintains a tollfree number - (800) 662-9278.

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## Emissions Trading in Michigan

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credit user, a housewares hardware manufacturer, applied the credits to their dip painting operation in order to achieve compliance with the state rule for metal coating until the powder coat system can begin operation. This rule limits the VOC content of coatings for metal parts to 3.0 pounds of VOC per gallon of coating, minus water as applied.

The second company, a metal fastener coating operation, used credits to achieve compliance with the state rule for metal coating for their adhesive coating lines and a marking inks line. For the adhesive line, the coating is thinned with Toluene prior to application.

Both companies worked with the MDEQ to develop a calculation methodology to determine the number of tons that would be emitted in excess of the allowed emissions. Since the allowed emissions are expressed as an emission rate (i.e., pounds VOC per gallon applied), the number of tons emitted at the allowed rate must be calculated. The calculations must also account for changes in the solids content of the coating which effects the quantity of coating used. The higher the solids content, the fewer gallons of coating are used.

In addition to using credits for compliance emission rates and limits, they can also be used as a compliance insurance to address accidental releases of excess emissions due to temporary equipment shutdown or malfunction. A chemical manufacturer is currently using credits as a compliance insurance to address future shutdown scenarios.

The use of emissions trading will continue to increase in Michigan. Future regulations will most likely require additional reductions at currently regulated as well as non-regulated sources. Integrating emissions trading into a company's overall compliance strategy will give them a competitive edge in the marketplace.

### **MMA and MDEQ Challenge EPA Disapproval of Startup, Shutdown, and Malfunction Rules**

On February 20, 1998, the US Environmental Protection Agency ("USEPA") disapproved Michigan's Air Quality Rules for Startup, Shutdown, and Malfunction (Rules 912-914). Although the rules are still valid in the State, the EPA will not treat the rules as effective in any federal enforcement action nor for purposes of Title V Renewable Operating Permit Program. The Michigan Manufacturers Association ("MMA") and the Michigan Department of Environmental Quality ("MDEQ") filed suit against EPA in the Sixth Circuit Court of Appeals in an attempt to have the Court overturn EPA's decision. The MMA, MDEQ, and EPA have agreed to hold the case in abeyance pending settlement discussions. MMA, MDEQ and EPA are participating in joint conference calls to determine the possibility of resolving this issue through negotiation.

### **Upcoming Chapter Events**

**October 21**, McGuire's Resort in Cadillac, presentation by Pat Donovan of MDEQ covering Pollution Prevention (southern area members, note that the Oct 29 presentation in GR will also cover this topic)

On **October 29** the West Michigan Chapter will hold a joint meeting with Grand Rapids Area Chamber of Commerce Environmental Affairs Committee. Featured speakers will be John Mooney from Region 5 of the US EPA, on "NOx Emissions Standards" and Maggie Fields from the Michigan Department of Environmental Quality on "Pollution Prevention." The Luncheon will be held from 11:45 to 1:15 at the Grand Rapids Area Chamber of Commerce, the Waters Building, 111 Pearl, NW, Grand Rapids. The cost to attend is \$10.00. For registration information, contact René Palileo at the Grand Rapids Chamber of Commerce, (616) 771-0348.

**November 25**, at 7:30 a.m. the Water Environment Federation and A&WMA will co-host a breakfast meeting, "Talking Turkey with Vern" with Congressman Vern Ehlers. The meeting will be held at Holiday Inn at Hwy 131 and 28th St. in Wyoming. Breakfast will be served at 7:45. The cost is \$10. Members should receive a mailing re registration. Contact Mary Jane at (616) 261-3552 regarding any registration questions or difficulties. The presentation topics will be science policy, status of environmental legislation, expectations for the next Congress, and any questions from the attendees.

The Hazardous Waste conference with Dale DeKraker of the Michigan Department of Environmental Quality will be on the morning of **February 10, 1999** at Grand Valley State University's Eberhard Center in Grand Rapids.

### **Major Report on Pollution Prevention Released**

- What are Michigan companies actually doing about pollution prevention?
- Why are some companies actively involved in pollution prevention and why do some companies resist pollution prevention?
- Are there organizational issues that relate to pollution prevention efforts?

Organizational Factors Associated with Pollution Prevention Programs is a project of the Robert B. Annis Water Resources Institute at Grand Valley State University that recently answered these questions. The project is funded by a grant from the Office of Great Lakes, Michigan Great Lakes Protection Fund.

In 1998, companies from throughout Michigan completed a survey and were interviewed to answer the questions posed above. Results from surveys from 235 companies and interviews of 50 companies by the Retired Engineer Technical Assistance Foundation were compiled.

Most companies rated themselves as being excellent or good with their pollution prevention (P2) efforts. The study revealed that top management has a great influence on the implementation of pollution prevention in a facility. There were many documented cost savings from P2 projects. Improved housekeeping and spill leak protection were commonly mentioned P2 techniques. Barriers to P2 included strict customer specifications and financial considerations. The motivation for P2 is generally because it is the "right thing to do."

The complete 200 page report with case studies can be obtained from the Robert B. Annis Water Resources Institute by submitting a request -

via FAX (616) 895-3864 or E-mail: [vailj@gvsu.edu](mailto:vailj@gvsu.edu).

### **West Michigan Air & Waste Management Association Committee Contacts**

#### **Coordination**

Jim LaMancusa  
(616) 554-7159

#### **Development**

Ken Evans  
(517) 788-0404

#### **Education**

Janet Vail  
(616) 895-3048

#### **Internet**

Cal Peters  
(616) 356-0245

#### **Membership**

Marc Groenleer  
(616) 957-3690

#### **Newsletter**

Sue Pemberton  
(517) 676-3803 x 2024

#### **Nominating/Bylaws**

Chuck Davison  
(616) 787-6503

#### **Program**

Jim Enright  
(616) 732-1705

#### **Scholarship**

Dave Rinard  
(616) 247-2996

#### **Science Fair**

Kathy Herman  
(616) 248-7390

## An Invitation to Participate

To give you, our West Michigan Chapter members, an idea of how the chapter functions, the various committees are described below. You are invited to contact the committee chairs if there are particular activities in which you are interested and would like to contribute your time.

**Coordination Committee:** This committee functions to coordinate the mutual interests of the East and West Michigan Chapters. West Michigan's co-chair is Jim LaMancusa.

**Development:** The charge of the Development Committee is to seek out institutional and industrial support and sponsorship. Ken Evans chairs this committee.

**Education and Outreach:** Public and chapter education programs are the charge of the Education Committee, as well as fostering relationships with existing student chapters and assisting in the formation of new student chapters. Janet Vail serves as the chair of this committee.

**Finance:** This committee is responsible for the financial operations of the Chapter. Ron Blouw is our Chapter Treasurer.

**Internet Coordinator:** Cal Peters is responsible for the establishment and maintenance of the West Michigan A&WMA Web Page:

**Long Range Planning:** This committee is made up of the Chapter Board of Directors. Its charge is to develop the calendar of events as well as a yearly strategic plan. The goal is to have diverse representation at all meetings by hosting events at several geographic locations during the year; to host events which provide educational information on a variety of issues, providing useful information to all sizes and types of member companies and organizations.

**Membership:** Mark Groenleer chairs this committee, which is responsible for promoting the growth of the Association by soliciting membership.

**Newsletter:** The Newsletter Committee takes the lead in the production of the Chapter Newsletter. Its goals are to edit and publish a periodic newsletter for the Chapter that contains timely articles, announcements, and recognition of contributors. Sue Pemberton chairs this committee.

**Nominating/Bylaws:** The nominating and bylaws committees are responsible for soliciting nominations and screening nominees for officer and board member positions. The committee consist of one member as chair and two other members. With board approval, their recommendations are the basis for the slate of candidates for a given election. They also submit proposed amendments to bylaws and assist in preparing appropriate bylaw changes to be presented at the

General Business Meeting held each spring. Chuck Davison is the committee chair.

**Program:** Jim Enright oversees this committee, which is responsible for securing speakers and arranging and presenting the program for technical meetings. The committee also makes the physical arrangements for meetings, including the meeting place, meal arrangements, special equipment, and other requirements for carrying out the programs.

**Scholarship:** Developing the guidelines for dissemination of scholarships and making recommendations to the Board for recipients is the charge of this committee. Dave Rinard is the Chair of the committee.

**Science Fair:** Kathy Herman is in charge of the Science Fair committee. Each year A&WMA supports the Regional Science Olympiad. This year the chapter also sponsored the National Tournament in May.

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## 1998-99 Officers & Board of Directors

### Chair

Chuck Davison, Amway Corporation  
(616) 787-6504

### Vice Chair

Jim Kozminski, Haworth, Inc.  
(616) 393-1533

### Treasurer

Ron Blouw, Delphi Automotive Systems  
(616) 246-2112

### Secretary

Janet Vail, Water Resources Institute, GVSU  
(616) 895-3048

### Section Representative

Jim Lamancusa, Lacks Enterprises  
(616) 554-7159

### Past Chair

Dave Rinard, Steelcase  
(616) 247-2996

### Directors

Doug Crim, Miller Canfield Paddock & Stone  
(616) 454-8656

Anne Couture, Couture Environmental Strategies, LLC  
(616) 629-9842

Janis Denman, MDEQ, Air Quality Division  
(616) 775-3960

Jim Enright, Law Weathers & Richardson, PC  
(616) 732-1705

Ken Evans, Consumers Energy  
(517) 788-0404

Marc Groenleer, NTH Consultants, Ltd.  
(616) 957-3690

Sue Pemberton, Dart Container Corporation  
(517) 676-3803, ext. 2024

Tammi VanTil, Primary Power  
(616) 454-9647

**Part 55, Air Pollution Control, Natural Resources and Environmental Protection Act, 1994 PA 451, as Amended**

Organizational Factors Associated with Pollution The Air Quality Division will be holding a public hearing on December 9, 1998 (see December 9 listing in this calendar) on proposed revisions to R 336.1104, R 336.1602, R 336.2701, and R 336.2702 and the rescission of R 336.1320 and R 336.2703 (ORR No. 97-054EQ). The proposed amendments will add a definition for demolition waste material, allow sources subject to a Renewable Operating Permit to use equivalent alternate compliance procedures, and correct references to Public Acts. The proposed rules can be viewed and downloaded from the Internet at [www.deq.state.mi.us/aqd/rules/proposed.html](http://www.deq.state.mi.us/aqd/rules/proposed.html). Copies of the proposed rules may also be obtained by contacting the Michigan Department of Environmental Quality, Air Quality Division, 106 West Allegan Street, P.O. Box 30260, Lansing, Michigan 48909-7760. Written comments will be accepted until 5:00 p.m. on December 9, 1998 and should be mailed to the address above.

**Information Contact:**

Jerald Trautman  
Air Quality Division  
5173354855.

**Decision-maker:**

DEQ Director

Anyone wishing to place an article in the Winter issue of the Environet, please e-mail or call Sue Pemberton by December 15th.  
[sue\\_pemberton@dartcontainer.com](mailto:sue_pemberton@dartcontainer.com)  
(517) 676-3803, ext. 2024.

**MDEQ to Hold MAERS Training Sessions**

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**Date Location**

- 11/10/98 - Ramada Inn, Marquette, Michigan
- 11/12/98 - Treetops Sylvan Resort, Gaylord, Michigan
- 11/13/98 - Crystal Mountain Resort, Thompsonville, Michigan
- 11/16/98 - Crowne Plaza, Grand Rapids, Michigan
- 11/19/98 - Holiday Inn Southgate - Heritage Center, Southgate, Michigan
- 11/20/98 - Van Dyke Park Suite Hotel, Warren, Michigan
- 11/23/98 - Fetzer Center, Western Michigan University, Kalamazoo, Michigan
- 12/01/98 - Holiday Inn - Gateway Centre, Flint, Michigan
- 12/03/98 - Holiday Inn, Jackson, Michigan
- 12/09/98 - Burton Manor, Livonia, Michigan

**EPCRA Training to be Conducted by MDEQ**

A full-day training is co-sponsored by the Michigan Department of Environmental Quality's Environmental Assistance Division (EAD) and the U. S. Environmental Protection Agency (EPA). The training gives the combined expertise of the EPA, the EAD, the Michigan State Emergency Response Commission (SERC), and the Local Emergency Planning Committee (LEPC). Representatives from these agencies will be working together to provide a detailed understanding of EPCRA hazardous chemical reporting requirements and new amendments. An overview of emergency planning requirements, emergency release notification requirements, and material safety data sheets (MSDS) will be provided. Participants are encouraged to bring chemical inventory data to practice filling out facility-specific Tier II forms. Experts will be available to answer questions on federal, state, and local requirements; exemptions in reporting; penalties for non-compliance; and other relevant questions.

**Registration Contact:**

DEQ Environmental Assistance Center  
800-662-9278.

**Information Contact:**

Title III Program Office  
Environmental Assistance Division  
517-373-8481.

**Date Location**

- 01/26/99 - Bavarian Inn Lodge, Frankenmuth, Michigan
- 01/28/99 - Crowne Plaza, Grand Rapids, Michigan

**EPA Sponsors Waste Minimization/Pollution Prevention Conference**

The United States Environmental Protection Agency, Region 5, is sponsoring this conference for generators of hazardous waste. The conference will include presentations by industry leaders on how to reduce and even eliminate hazardous waste generation, solid waste, wastewater discharges, and air emissions. The benefits from such reductions include cost savings in waste treatment and disposal, compliance with regulatory requirements, and, in some cases, exclusion from a regulated status. Sources of free technical assistance and information will be presented. DEQ's Environmental Assistance Division will have a display at the conference, and staff will be available to answer questions.

The session will be held at the:  
Hyatt Regency Hotel, Chicago, Illinois.

**Information Contact:**

U.S. EPA Region 5  
1-800-844-9049

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**Corporate Sponsors**

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**Contributing Organizations**

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Grand Valley State University  
Water Resources Institute

Michigan Department of Environmental Quality  
MSU A&WMA Student Chapter

For an information packet on the Corporate Sponsor Program, please contact  
Ken Evans at (517) 788-0404 or E-mail Ken at [akevans@cmsenergy.com](mailto:akevans@cmsenergy.com)

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**AIR & WASTE MANAGEMENT  
ASSOCIATION  
WEST MICHIGAN CHAPTER  
MEMBERSHIP FORM**

Return by fax to: Marc Groenleer, Membership Chair  
Phone: (616) 957-3690 fax (616) 957-4386  
E-mail: [mgroenleer@nthconsultants.com](mailto:mgroenleer@nthconsultants.com)

Your Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

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

Recruited by \_\_\_\_\_

Type of Member Status \_\_\_\_\_

- 1 - Full Membership, please send the National A&WMA application form.
- 2 - Chapter's Local Associate, please send the L.A. application form.
- 3 - East Michigan member wishing to also join West Michigan Chapter.