



www.mcecc.org

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Terms in body text that are underlined and printed in green are defined in the terminology section on page 3 of this issue.

Good Web Sites
Good Information

Muskegon Conservation District
www.muskegoncd.org/

Lake Michigan Federation
www.lakemichigan.org/

EPA AIRNow
www.epa.gov/airnow/

Air Quality for Kids
www.epa.gov/airnow/aqikids/

Lead Poisoning Facts
www.epa.gov/lead/

EPA - Muskegon Lake AOC
www.epa.gov/glnpo/aoc/msklake/

Coastal Cleanup
www.lakemichigan.org/jobs/beach

Your Environment

A collaborative information resource for the Muskegon County Community

MCECC News

FALL 2002

The Muskegon County Environmental Coordinating Council has two major projects underway that will concentrate on gathering information on environmental activities throughout Muskegon County.

The first project involves the development of an activity survey targeting a variety of local groups, business, and governmental entities. Information received from this survey will indicate where needs exist and where projects have already begun addressing environmental concerns in Muskegon County.

In addition, the Council is gathering data on recycling practices. Information collected from this research will assist in the development of targeted programs to increase recycling practices throughout the County.

Armed with this useful information, the Muskegon County Environmental Coordinating Council will be going through a strategic planning process to identify issues to be included in Council objectives.

The Muskegon Lake PAC

Kathy Evans, Muskegon Conservation District

In 1985, Muskegon Lake was identified by the International Joint Commission as one of 42 sites negatively impacting the five Great Lakes due to degraded ecological conditions that correspond to criteria known as Beneficial Use Impairments. Muskegon Lake is one of 14 Areas of Concern (AOC) in Michigan.

Though significant water quality improvements were made with the diversion of wastewater from the lake to the Muskegon County Wastewater Management System, Muskegon Lake's ecosystem is impaired to this day. The lake's current problems are associated with urban runoff, dredging and filling at the shoreline, the historical discharge of polluted wastewater into the lake, localized groundwater contamination plumes, and the potential effects on Lake Michigan.

To address these issues, a coalition of community members, called the Muskegon Lake Public Advisory Council (PAC), was established in the spring of 1992. The mission of the Muskegon Lake PAC is to address the quality of Muskegon Lake and its watershed with activities that advise agencies,

form partnerships and express local community views, and assist in the removal of Muskegon Lake from the International Joint Commission's Area of Concern list.

To date, the Muskegon Lake PAC has played an important role in increasing public involvement, providing educational activities, and implementing Muskegon Lake watershed projects. Some of these projects include hands-on shoreline cleanups and providing avenues for public input on remedial investigations of contaminated sediments.

In partnership with the Muskegon Conservation District, the PAC is currently involved in updating the Muskegon Lake Remedial Action Plan (RAP). A companion to the 1987 and 1994 RAP, the 2002 update summarizes the status of each Muskegon Lake Beneficial Use Impairment and is intended for use as a guide to facilitate continued interest and involvement by the public, private, and nonprofit sectors.

If you are interested in knowing more about the Muskegon Lake PAC or the 2002 Muskegon Lake RAP Update, contact the Conservation District at (231) 773-0008 or visit www.muskegonlake.org.

Would you like to Volunteer?

Muskegon County Coastal Cleanup, 2002

On Saturday, September 21, 2002, 9:00 am to 12:00 noon, hundreds of local volunteers and students will participate in the 12th annual Muskegon County Coastal Cleanup. The event is held in conjunction with the Ocean Conservancy's fourteen-year old International Coastal Cleanup. The Lake Michigan Federation serves as the State of Michigan Coordinator.

Muskegon area schools will lend a hand by cleaning the shoreline while learning about our natural resources and collecting data on what is found during the event.

All volunteer and student cleanup results are compiled by the Muskegon Conservation District and sent to Lake Michigan Federation for inclusion

in the Ocean Conservancy's international data summary. Locally, the conservation district and other organizations use the data to support various natural resource improvement and education projects.

2002 Targeted Beaches

- Meinert Park
- Lloyds Landing/Old Channel Trail
- Duck Lake State Park
- Pioneer Park, Muskegon State Park
- Pere Marquette Park
- Hoffmaster State Park
- Mona Lake Park



If you are interested in participating in the Coastal

The Air You Breathe Source: United States Environmental Protection Agency

Thick, black smoke belching out of the exhaust pipes of semi-trucks. White clouds puffing out of smoke stacks. Swirls of dust picked up by the wind off a pile of dirt. All are sources of particulate matter (PM).

PM makes up the solid or liquid particles that are in the air we breathe. PM impacts the environment by decreasing visibility and harming crops and plant life. Also, because PM can be very small, it is easily inhaled and trapped in the lungs, causing various health problems.

What are the sources of Particulate Matter?

Particulate matter comes from a number of sources. Generally, any activity which involves burning of materials or any dust generating activities are sources of PM. Along with the examples listed above, PM can come from fireplaces and cars driving on unpaved roads as well as the smoke from large industrial plants.

How Does PM Affect Me?

Particulate matter is present in many different sizes. Large particles mainly come from the soil and smaller particles come from the burning of fossil fuels, like gasoline in cars and the coal used at power plants. The smaller the particle, the more dangerous, because it can travel deeper into the lungs. When particulate matter is breathed in, it can irritate and damage the lungs, causing breathing problems.

People who have asthma or some type of lung or heart disease are directly impacted by high levels of PM. The elderly and children are also especially vulnerable to the effects of PM. In addition, many studies have shown links between PM and health effects. Increases in PM have been linked to decreases in lung function, increases in breathing problems and hospitalization, and early death.



Particulate Matter Monitoring in Muskegon County

Currently, one PM monitoring station is located in Muskegon County. This particular station measures PM equal to or less than 2.5 μm in diameter. Called PM_{2.5}, these particles can penetrate into the lungs during normal breathing through the nose. Because monitoring has only occurred since 1999, there is insufficient data to report accurate trends; however, measurements at this station have shown that the mean Muskegon County Metropolitan Statistical Area (Grand Rapids, Muskegon, and Holland) PM_{2.5} level was the same or lower than many other areas in the State of Michigan for 1999 and 2000. For more information on Muskegon Air Quality, see the 2000 Annual Air Quality Report for Michigan located online at www.michigan.gov/deq.

Ozone Action! Days - What you can do to protect your health and our atmosphere

Amy Haack, West Michigan Shoreline Regional Development Commission

During the summer, it's great to go outside and enjoy the fresh air and sunshine; however, as the days grow hotter, the likelihood of there being fresh air that is safe to breathe starts to decrease.

Recent summers have had a number of days with excessive levels of ozone air pollution. On these unhealthy air quality days, called Ozone Action! Days, it is recommended that children and certain elderly people reduce normal activity. Even fit adults are warned not to exercise outdoors on these days as just breathing can be harmful.

Ozone Action! Days, are called by a four state team of meteorologists who determine that weather conditions are likely to combine with pollution to create elevated amounts of ground-level ozone. Ground-level ozone is formed by the chemical reaction of certain air pollutants in the presence of high temperature and sunlight. This summer Muskegon County has had at least 13 Ozone Action! Days. There were 12 Ozone Action! Days in the summer of 2001 in Muskegon.

Ozone contributes to unhealthy air quality as it can temporarily decrease lung capacity causing shortness of breath, chest pain, and coughing. Ozone aggravates respiratory diseases, like asthma, bronchitis and emphysema, and makes people more susceptible to respiratory infections. Many public and private organizations, as well as the media, throughout Muskegon, Kent, and Ottawa Counties have joined forces under the umbrella of the West Michigan Clean Air Coalition to make an effort to educate people about what ozone is, and what can be done to prevent it. Through these partnerships, citizens are informed when an Ozone Action! Day is forecasted.

Citizens are encouraged to follow some simple guidelines, which will decrease the severity, or even prevent, dangerously high ozone levels on days when it is most likely to be a problem. A recent survey shows that almost 80 percent of citizens are aware of Ozone Action! Days and the Ozone Action! Program; and over two-thirds of respondents stated they engaged in voluntary actions during all, or almost all of the Ozone Action! Days.

There are a number of things you can do to prevent the creation of ozone and improve the quality of the air we breathe. When you see notification of an Ozone Action! Day, please remember to take action. When everyone does their part, it can make a difference.

For more information on Ozone Action! Days, contact Amy Haack, Muskegon County Ozone Action Coordinator of the West Michigan Shoreline Regional Development Commission at (231) 722-7878 ext.19.

Do Your Share For Cleaner Air!

Things YOU can do
to reduce ground-level ozone pollution

- Take public transportation, carpool, bike, or walk to work
- Combine errands into one trip; it's called trip chaining
- Avoid excessive idling in your car and avoid drive-thru lanes
- Postpone refueling cars until after 6:00 pm
- Keep vehicles well maintained
- Postpone using gas powered lawn and garden equipment until evening
- Educate children about the dangers of pollution so that they will grow up conscious of actions that can help the environment

Terminology

- **Ozone** - A bluish gas that is harmful to breathe. The ozone layer, miles above the surface of the earth, protects us from cancer causing solar ultraviolet radiation, but ground level ozone damages our lung tissue. This harmful ozone is formed through a complex chemical reaction involving hydrocarbons, nitrogen oxides and sunlight on summer days.
- **International Joint Commission (IJC)** - An organization formed in 1909 by Canada and the United States as part of an international effort to protect and manage the Great Lakes.
- **Beneficial Use Impairments (BUIs)** - A listing of 14 impairments to beneficial uses that the Great Lakes Water Quality Agreement defined as reasons for listing a site as an Area of Concern. See the 2002 Muskegon Lake RAP for restrictions that apply to Muskegon Lake.
- **Mean** - The term "mean" in mathematics reflects a specific relationship of one number as the middle point of two extremes.

October 20 - 26 is Lead Poisoning Prevention Week

Childhood lead poisoning is considered the most preventable environmental disease of young children but almost 1 million children have elevated blood lead levels. The goal of National Lead Poisoning Prevention Week is twofold: to raise awareness about this serious health issue and the importance of screening at-risk children at ages 1 and 2 years and children 36-72 months who have not been previously screened, and to urge people to take precautions to minimize exposure to lead.

A lead poisoned child may seem healthy or may have learning and behavior problems, headaches, hearing problems, weight loss, hyperactivity, irritability, or chronic tiredness.

According to the Michigan Department of Community Health (MDCH), 36% or 22,107 of all housing units in Muskegon County were built before 1950. In combination with the number of children under age six, and current poverty rates, MDCH has determined that 11 zip codes in the County carry a high risk for lead poisoning.

Is Your Child At Risk? Take this self-test to find out.

- Does your child live in (or lived in) or regularly visit a house built before 1950 with peeling or chipping paint? This could include a day care, preschool, home of babysitter or relative etc
- Does your child live in (or lived in) or regularly visit a house built before 1978 with recent (within the past six months), ongoing or planned renovation or remodeling?
- Does your child have (or had) a brother or sister, housemate, or playmate with lead poisoning?
- Does your child live (or ever lived) near a busy street or highway?
- Does your child eat, drink or use any home or folk remedies which may contain lead?
- Does your home plumbing have lead pipes or copper pipes with lead solder joints?

If you answered yes to any of these questions, your child is at risk for lead poisoning. The only way to know for sure is to have you child tested. You can call the Health Department at 231-724-1209 or contact your personal physician for more information on lead exposure.

Muskegon County Zip Codes At-Risk for Lead Poisoning

49303	49318
49415	49437
49440	49441
49442	49444
49451	49457
49461	

If you would like to submit information on an issue, an environmental organization, or have questions pertaining to an article, please contact:

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Muskegon County Health Department
at montgomeryji@co.muskegon.mi.us (231) 724-1293
or
Liz Vos
Project Director, MCECC
at liz@mcecc.org (231) 557-2915

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