Town Hall Meeting

The House Street Disposal Area and Perfluoroalkyl Substances (PFAS)

November 29, 2017
Rockford Freshman Center

TOWN HALL PROGRAM

PARTICIPATING

Welcome, Introductions, House Rules

MC Steve Kelso / Adam London

Michigan PFAS Action Response Team

Carol Isaacs

Environmental Quality

Leeming, Hendershott, O'Donnell

Health and Human Services

Kory Groetsch

Kent County Health Department

Dr. Hall

Wolverine World Wide

Chris Hufnagel, Janet Anderson

Question and Answer

All Officials

Agenda

Welcome

Expectations

Presentations

- MPART, DEQ,
- Wolverine, DHHS, KCHD

Questions & Answers

(Information at michigan.gov/belmont)

Governor Snyder and the State of Michigan are taking action to address this issue in a proactive and innovative way.

Ten state departments, in coordination with local and federal officials across Michigan, are working together to ensure that the public health and safety of residents is protected while ensuring our environmental heritage is secure for generations of Michiganders to come.

MPART -

Enhancing Cooperation and Coordination...

- Executive Directive 2017-4, establishes the Michigan PFAS Action Response Team (MPART).
- The directive is designed to ensure a comprehensive, cohesive and timely response to the continued mitigation of perfluoroalkyl and polyfluoroalkyl substances (PFAS) across Michigan.
- The team is tasked with enhancing cooperation and coordination among local, state and federal agencies charged with identifying, communicating and addressing the potential effects of PFAS in Michigan and protecting public health.

Carol Isaacs – MPART Chief Executive

The team is led by retired Michigan Chief Deputy Attorney General Carol Isaacs, who has been authorized by the Governor to ensure timely action is taken on all environmental, public health and public information fronts.

- Extensive experience within state government and previously served in both Michigan's legislative and executive branches.
- Formerly a senior critical care nurse and manager for many years, and served on numerous hospital committees.
- Received the Lifetime Achievement Award from the National Association of Attorneys General in 2016.

Dr. David Savitz –Nationally Recognized PFAS Advisor

- ➤ Dr. David Savitz of Brown University's School of Public Health will serve as the team's academic consultant. Savitz is a professor of epidemiology and has served in several positions within academic and professional societies, boards and committees.
- ➤ He is the recipient of numerous awards and honors, including his most recent in 2011 the National Cancer Institute's Distinguished Lecturer Award in Occupational and Environmental Epidemiology.

Coordinated Action and Response

- The team includes representatives from:
 - Michigan Department of Environmental Quality
 - Michigan Department of Health and Human Services
 - Michigan Department of Military and Veterans Affairs
 - Michigan Department of Agriculture and Rural Development
 - Michigan Department of Natural Resources
 - Michigan Departments of State Police
 - Michigan Department of Technology, Management and Budget
 - Michigan Department of Treasury
 - Michigan Department of Licensing and Regulatory Affairs
 - Michigan Department of Education
- ➤ It also will coordinate with the National Guard Bureau, U.S. Department of Defense, and the appropriate local health departments and government agencies on PFAS contaminant issues.

PFAS -

Sometimes called PFCs, are a group of chemicals that are resistant to heat, water, and oil.

- Per- and polyfluoroalkyl substances (PFAS), sometimes called PFCs, are a group of chemicals that are resistant to heat, water, and oil.
- PFAS have been classified by the U.S. Environmental Protection Agency (EPA) as an emerging contaminate on the national landscape.
- For decades, they have been used in many industrial applications and consumer products such as carpeting, waterproof clothing, upholstery, food paper wrappings, fire-fighting foams, and metal plating.
- These chemicals are persistent, which means they do not break down in the environment.

- They also bioaccumulate, meaning the amount builds up over time in the blood and organs.
- Studies in animals who were exposed to PFAS found links between the chemicals and increased cholesterol, changes in the body's hormones and immune system, decreased fertility, and increased risk of certain cancers.
- The EPA has set a lifetime health advisory level for two PFAS in drinking water: perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS). The lifetime advisory level is 70 parts per trillion (ppt) for PFOA and PFOS combined.
- THE PFOA and PFOS LTHA is the level, or amount, below which no harm is expected from these chemicals. There are other PFAS compounds that do not have LTHA levels.

Taking Action, Protecting People

- Taking immediate action to mitigate risks to public health and protect environment.
- Studying the science and working with national experts to obtain the most up-to-date information.
- Working daily to identify potential locations for additional testing, environmental clean up and monitoring.
- Working to provide interim and long term solutions to this issue.

For more information about PFAS contamination and the coordinated efforts currently underway to address it in Michigan.

Michigan.gov/pfasresponse

State of Michigan Environmental Assistance Center 800-662-9278

MDHHS Toxicology Hotline 800-648-6942

DEQ-Deputy Director Susan Leeming

- DEQ commitment to work in the public's best interest
- Emerging Contaminant
- Working cooperatively to achieve protection public health

DEQ Agenda

- ▶ Basics of PFAS/PFOA/PFOS
- Wolverine House Street Investigation Update
- North Kent Disposal (Offsite) Investigations
 - ▶Initial Results
- ➤ Independent 3rd Party Test Results

Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS)

Frequently Asked Questions

What are PFAS?

Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are a large group of man-made chemicals that have been used in industry and consumer products worldwide since the 1950s.

- PFAS do not occur naturally, but are widespread in the environment.
- PFAS are found in people, wildlife and fish all over the world.
- Some PFAS can stay in people's bodies a long time.
- Some PFAS do not break down easily in the environment.

How can I be exposed to PFAS?

PFAS contamination may be in drinking water, food, indoor dust, some consumer products, and workplaces. Most non worker exposures occur through drinking contaminated water or eating food that contains PFAS.

Although some types of PFAS are no longer used, some products may still contain PFAS:

- Food packaging materials
- Nonstick cookware
- Stain resistant carpet treatments
- Water resistant clothing
- Cleaning products
- Paints, varnishes and sealants
- Firefighting foam
- Some cosmetics

How can I reduce my exposure to PFAS?

PFAS are present at low levels in some food products and in the environment (air, water, soil etc.), so you probably cannot prevent PFAS exposure altogether. However, if you live near known sources of PFAS contamination, you can take steps to reduce your risk of exposure.

- If your drinking water contains PFAS above the EPA Lifetime Health Advisory, consider using an alternative or treated water source for any activity in which you might swallow water:
 - » drinking
 - » food preparation
 - » cooking
 - » brushing teeth, and
 - » preparing infant formula
- Check for fish advisories for water bodies where you fish.
 - » Follow fish advisories that tell people to stop or limit eating fish from waters contaminated with PFAS or other compounds.
 - » Research has shown the benefits of eating fish, so continue to eat fish from safe sources as part of your healthy diet.
- Read consumer product labels and avoid using those with PFAS.

Agency for Toxic Substances and Disease Registry

Division of Community Health Investigations

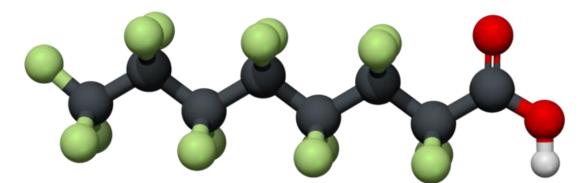




Per and Poly-fluoroalkyl Substances (PFAS)

Per and Poly-fluoroalkyl Substances (PFAS)- Group

- Perfluorooctane sulfonate (PFOS) *
- Perfluorooctanoic acid (PFOA)*
- Perfluorohexane sulfonate (PFHxS)
- * 70 parts per trillion combined PFOS/PFOA EPA Life Time Health Advisory Recommendation



The House Street Disposal Area

The House Street Disposal Area and Perfluoroalkyl Substances (PFAS)



History of the House Street Disposal Area

- Wolverine Shoe & Tanning Co. purchases 1855 House Street NE in the early 1960's. Waste disposal predates purchase.
- Material disposed into trenches, storage ponds & seepage lagoons
- 1966: Property licensed as an 1965 PA 87 solid waste disposal facility
- 1970: Waste disposal shifted to another location
 disposal area mothballed
- 1978: Solid waste disposal area license expires



House Street Disposal Facility 11-1965 USGS aerial photograph



Timeline of Recent Events January 2017 to June 2017

Late January



April

February 2017 March 2017









July 12-13

August 10-24 Quantification of the second o

Timeline of Recent Events June to September 2017

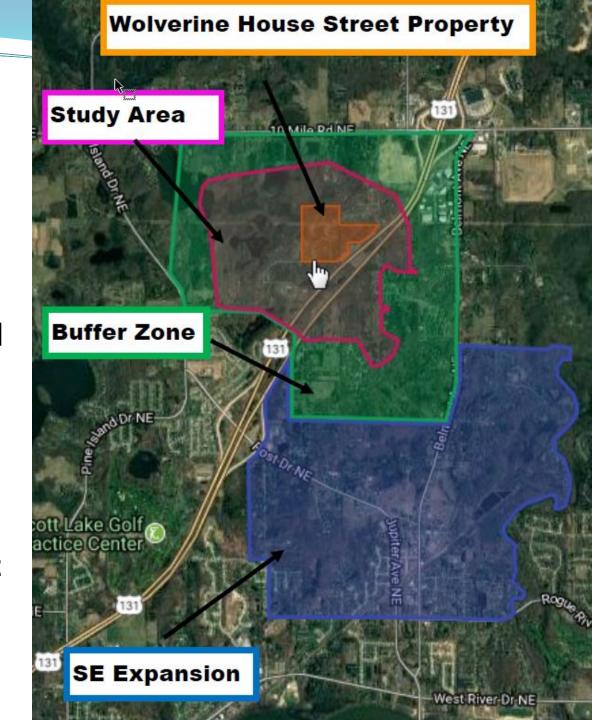


Timeline of Recent Events September to November 2017

- Here is what DEQ has done....
 - Request Wolverine sample the SE Expansion Area
 - Request Wolverine to develop a work plan to fully define the extent of the PFAS contamination
 - Request Wolverine to remove drums and leather scraps
 - Set up an expanded project team

Wolverine House Street Current Status:

- 640 Homes sampled
- 614 Results Received
- 30 > 70 ppt
- 404 Non Detects for PFOA/PFOS
- 180 Between 1-70 ppt







Wolverine House Street DEQ Actions:

- DEQ meets with Wolverine daily to discuss data, next steps and request action
- DEQ hires AECOM to provide project assistance, sample residential wells, review data sets, investigate offsite complaints and provide PFAS experts.
- DEQ has taken 1400 calls and emails
- DEQ has received 6 work plans
- DEQ has spoken 5 neighborhood & 2 Town Hall meetings
- DEQ provides weekly updates to legislators

North Kent Disposal Investigation & Process

North Kent Disposal Investigations



North Kent Disposal Investigation Process

Start Finish

Citizen Reported Locations Received & Logged

- Reported locations field inspected
- Aerial photos reviewed
- Potential risks assessed
- Additional investigation needed?
 - Wolverine related or not?

Refer/ Recommend additional work/Closeout







North Kent Disposal Investigations





North Kent Disposal Investigations

The numbers:

DEQ received 88 reported locations from public:

- 20 locations from 4 areas:
 Evaluated and requested Wolverine action
- 18 locations from public:
 Evaluated and proposed for closure
- 50 locations from public: Evaluated and additional follow-up needed/non-Wolverine

4 Areas Requested for Wolverine Action

Area:	Number of Locations
House Street Corridor	8
Wolven Area	5
Jewell	3
Misc: Rezen, Ramsdell,	4

Residential Well Sampling Investigations (non-House Street)

Neighborhood	Number of Homes	Concern	Status
Ramsdell	8	Solid Waste	No PFAS Concern
Rezen Ct.	44	Liquid Waste Disposal	Results under Evaluation
Childsdale Ct.	8	Liquid Waste Disposal	Result under Evaluation
Wolven Area	159	Lime Waste used as Soil Amendment/ Gravel Pit	In Progress
Jewell	44	Lime Waste Used as Soil Amendment/ Drums/aerial photo	In Progress

Northern Kent County Independent 3rd Party Results

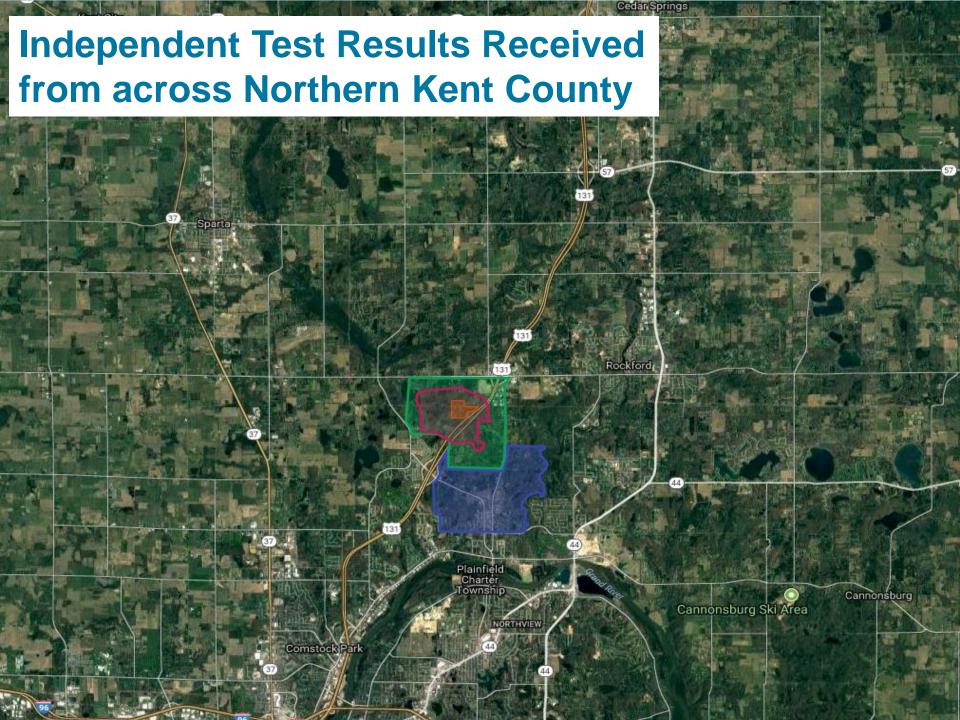
DEQ received:

- 57 results from citizens sharing their data from independent sampling
- Data indicates PFAS found in 50% of the drinking water wells at low levels

 5 results > 70 ppt which were confirmed by DEQ and are all in areas being sampled by Wolverine

DEQ Confirms Independent Test Results > 70 ppt for PFOA/PFOS





What's ahead?

- DEQ continues:
 - Scrutiny of Wolverine data
 - Holding all partners accountable
 - Priority for protection of public health
 - Evaluation of potential disposal locations
 - Hydrogeological study of House Street
 - Hydrogeological study of other potential disposal locations
 - Participate in the MPART Team

Michigan Department of Environmental Quality

800-662-9278 www.michigan.gov/belmont

