

## TERMS

ACUTE = Antrim County United Through Ecology (formed 2004)

TCE = Trichloroethene

MAWSA = Mancelona Area Water and Sewer Authority (formed 2001)

MDEQ or DEQ = Michigan Department of Environmental Quality

CRWF = Cedar River Well Field

## FACTS

- ✓ TCE released from 1947 until April 1967, by Mount Clemens Industries, (Wicks mfg, Dura Automotive)
- ✓ 7 miles long
- ✓ 1.5 miles wide
- ✓ 100 to 500 feet in depth
- ✓ 4,000-acre area
- ✓ 12 to 13 trillion gallons of groundwater in this area are contaminated with TCE.
- ✓ Migrating at 350 to 450 feet per year
- ✓ Largest TCE plume contamination site in Michigan and most likely in the USA
- ✓ State of Michigan's drinking water criteria for TCE of 5 ppb.
- ✓ TCE has migrated into the Cedar River with little to no effect
- ✓ DEQ has invested almost \$18 million to date from the two \$338 million bond issue passed in 1988 and 400million in1998 for environmental cleanup by Michigan voters
- ✓ MAWSA currently services approximately 1600 customers, 3500 people (2.2/household)
- ✓ CRWF has 4 wells with different pumping rates at 600' depth. (1 shut down for mechanical reasons)

Web Sites: DEQ = <http://bizhost-c5.mactec.biz/wickes/>

Three Lakes Association = <http://3lakes.com/projects/acute>

Health Department = [www.nwhealth.org/tceplume](http://www.nwhealth.org/tceplume)

## Common questions concerning the plume

Q1. *Why should the county contribute financially to the solution of the plume when the MDEQ will put forth the funds on a piece meal basis when needed?*

A. Short and long term economic health of the County.

Eliminate the perceived thinking that there is no long term solution.

Maintain and increase tax basis in county.

Show counties concern with this problem and its' affect on the citizens.

Money in the past has come from two bond issues approved by the voters. MDEQ's Director of Reclamation and Redevelopment, Bob Wagner, explained that money is almost gone. It just isn't there until another bond issue is approved.

Q2. *It's a State issue, not a local one?*

A. It can't get any more local than TCE in Antrim County ground water. We need to step up to the plate to help solve this problem per the Antrim Counties Master Plan. The State has already contributed about 18 million and at some point in the future they are planning to invest more.

Q3. *Why have the county stipulate some type of matching funds?*

A. The need for leverage to get additional grant money from the DEQ.

This would help implement the first phase of the long term solution.

Q4. *If the county steps up to the plate now, are they expected to do more in the future?*

A. We are working on long term moneys with the DEQ and are hopeful that a long term financial solution can be found thru the DEQ.

We can't eliminate that possibility, but we will try not to let that happen (because of county's financial status).

The DEQ knows that Antrim County and MAWSA have limited resources.

Q5. *What happens if the county chooses not to participate?*

A. Refer to question 1.

There would be a long term possibility of stagnant growth (tax basis) for the county.

Q6. *Is there really an economic impact to the region at this time?*

A. You only have to talk to a few realtors (Sign on sheet attached) to realize the magnitude of the impact. Real estate deals falling through, prices of homes in

the affected area significantly reduced, and prospective buyers becoming not interested once information about the TCE plume is disclosed.

Q7. *The DEQ has always stepped up to the plate in the past. Why not now?*

A. We are told they have very limited funds currently and don't know what the future will bring.

To provide clean drinking water for the county, a very limited first phase needs to be constructed now. (Details on what that involves)

Q8. *We have heard in the past that the State would pay for it?*

A. As much as we don't like it, things change with time. Months ago the prospects of the MDEQ being able to arrange for funds for this were promising. The current reality is that only loans are available, and not grants from other agencies.

Per the MDEQ, the State has no legal responsibility to provide safe drinking water.

Q9. *We have other important projects that are taking up our resources and where can the county find the money?*

A. Nothing is probably affecting the County's tax basis more than this. There will be a return on this investment in the future.

There could be money for this project in one of the reserve accounts.





**ACUTE**

March 14, 2014

Antrim County United Through Ecology\*

Robert Wagner, Chief  
DEQ-Remediation & Redevelopment Division  
Lansing, MI 48909-7926

**Re: TCE plume, supporting documentation to upgrade public water system**

The purpose of this letter is three fold (1) For the undersigned stakeholder organizations to express their appreciation to you and to DEQ's Remediation staff in Gaylord for their ongoing surveillance and community engagement to help address this huge trichloroethylene (TCE) groundwater contamination plume, and (2) to provide the following documentation and rationale for spending up to \$5.7 million to upgrade the Mancelona area public water system in a manner that ensures no TCE-contaminated public drinking water in this region of Antrim County for the foreseeable future, and (3) to encourage DEQ's ongoing leadership and collaboration in searching for practicable strategies to remediate portions of this TCE plume.

**1. Five construction projects and cost estimates to fix the public water system:**

In 2011, the State of Michigan appropriated \$300,000 for a preliminary engineering study to replace the Cedar River Well Field. It was believed that the groundwater plume of trichloroethylene (TCE) could contaminate a major source of drinking water for the Mancelona Area public water system. The most recent findings from that study have lead to a path forward to mitigate this ongoing problem in a comprehensive and long-term manner; estimated cost of \$5.7 million. **Attachment A** itemizes the details for your consideration. The process used to develop this solution involved local stakeholders working side by side with state officials.

**2. This TCE plume represents a significant potential economic threat to Shanty Creek Resort. Attachment B** is a synopsis of that potential economic impact on Shanty Creek Resort, which is Antrim County's primary employer. Shanty Creek Resort is also a prime destination location for *Pure Michigan* visitors seeking a wide range of desirable outdoor recreational & resort opportunities including golfing, skiing, boating, hiking and fishing.


**3. Attachment C** describes the economic impact that this TCE plume is currently having, and could potentially have on property values and the corresponding tax-based revenue for Antrim County and Custer Township. This impact is based primarily on the uncertainty associated with a lack of confidence in any long-term assurance of safe drinking water in the affected area. This lack of confidence is based on an underlying perception of potential property owners regarding piece-meal solutions to this problem.

**4. Attachment D** is a package of Letter of Support for improving the public water system.

\* ACUTE is an informal network of community, consensus building stakeholder organizations.


Respectfully submitted by the undersigned,

  
Gary Knapp  
ACUTE Coordinator

  
Dean Branson  
Three Lakes Association

  
Steve Grill, Leader  
Property Owners' Associations


  
Pete Bigford, COO  
Shanty Creek Resort

  
Mike Crawford, Chairman  
Antrim County Commissioners

  
Dave Howelmark  
Antrim County Commissioner

  
William Koenig, President  
Mancelona Area Water & Sewer Authority

  
David Schulz, President  
Village of Bellaire

  
Bob Edwards  
BluNorth Real Estate

  
Mike Griffin  
Coldwell Banker-Real Estate

  
Scott Kenzierski, Director  
NW Michigan Health Department

  
Roxanne Flake, Supervisor  
Custer Township

Cc: Representative Greg MacMaster, 105<sup>th</sup> District  
Janice Adams, DEQ-Remediation Division  
Joe Elliott, Gourdie-Fraser Engineering

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RICK SNYDER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
LANSING



DAN WYANT  
DIRECTOR

July 3, 2014

Chairman Michael Crawford  
Antrim County Board of Commissioners  
P.O. Box 520  
Bellaire, Michigan 49615

Dear Chairman Crawford and Fellow Commissioners:

I am writing to extend my appreciation for the opportunity you provided me to discuss with you the Wickes trichloroethylene (TCE) Groundwater contamination as it relates to the municipal water system on June 17, 2014.

As you know the continual spread of the TCE contaminated groundwater has resulted in a significant expenditure of state cleanup funds, totaling more than 18 million dollars to date, to provide safe drinking water to the residents of Antrim County. Providing reliable safe drinking water has been a challenge, but also a stellar example of partnership between the Department of Environmental Quality (DEQ), Custer Township, Mancelona Township, the Village of Mancelona, the Mancelona Area Water and Sewer Authority and their consultant, Gourdie-Fraser, in addition to the leadership and members of the Antrim County United Through Ecology (ACUTE), and Antrim County. The success of the water system could not have been realized without each of them.

Unfortunately, additional water system improvements and funding is necessary to address the risks posed by the spreading TCE contamination. While the state cleanup funds have been the principle source of funding in the past, at this time, state cleanup funds are close to depletion. Because of this funding limitation, the DEQ has committed \$500,000 to fund the proposed water system improvements. Further, in the event the community is able to contribute \$250,000 towards this effort, the DEQ will commit an additional \$250,000.

We are very fortunate that the citizens of Michigan have made cleanup funding available to address risks due to environmental contamination through the passage of the 1988 Environmental Protection Bond, and the 1998 Clean Michigan Initiative Bond. As you know, funding to address risk due to environmental contamination in Michigan and Antrim County is still needed. I am hopeful that new and continued funding will be forthcoming and we will look to the citizens of Michigan to support future cleanup funding in the very near future.

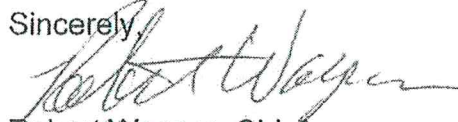
Chairman Michael Crawford and Fellow Commissioners

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July 3, 2014

If you have any additional questions, please contact me at 517-284-5144;  
wagnerr1@michigan.gov; or DEQ, P.O. Box 30426, Lansing, Michigan 48909-7926.

Sincerely,

A handwritten signature in dark ink, appearing to read "Robert Wagner", is written over the word "Sincerely,".

Robert Wagner, Chief  
Remediation and Redevelopment Division

cc: Mr. Gary Knapp, ACUTE  
Ms. Amy Epkey, DEQ  
Ms. Liane Shekter Smith, DEQ  
Mr. Randy Rothe, DEQ



**Mancelona Area  
Water and Sewer  
Authority**

August 4, 2014

Michael Crawford, Chairman  
Antrim County Board of Commissioners  
P.O. Box 520  
Bellaire, MI 49615

**Subject: MAWSA's Request for \$250,000 co-sponsorship to help install TCE-related improvements in public drinking water system**

Dear Chairman Crawford and Fellow Commissioners:

On behalf of the Mancelona Area Water Sewer Authority (MAWSA) Board of Directors, please consider this letter to be our formal request for \$250,000 from Antrim County to help pay for the installation of a set of short-term improvements in the public water system that are related to the large trichloroethylene (TCE) groundwater plume between Mancelona and the Cedar River Well Field. The original estimated cost to install this set of improvements is \$1,253,000. The engineering plans for the water reservoir, well, and transmission main is already in the process of being developed with the cost being covered separately from this request.

This request is based on the offer sent to you of \$750,000 offer from Michigan's Department of Environmental Quality (MDEQ), to help pay for these improvements, which is contingent on \$250,000 from local funds. If Antrim County agrees to pledge \$250,000, the MAWSA agrees to actively pursue the remaining funds from other local units of government, local businesses, and alternative sources.

We appreciate the efforts of an informal community engagement process to seek solutions to this TCE plume problem. We understand that this set of short-term projects is part of a long-term comprehensive plan to assure safe drinking water in the affected area for the foreseeable future.

Sincerely,

James W. MacQuarrie  
Administrator

Cc: Pete Garwood, Antrim County Planner  
Roxann Flake, Supervisor, Custer Township  
Rolland Kotz, Supervisor, Kearney Township  
Edward Niepoth, Trustee, Kearney Township  
R. Wagner & R. Roth, MDEQ-Remediation and Redevelopment Division  
Gary Knapp, ACUTE Coordinator/Facilitator  
William Koenig, MAWSA Chair

Mancelona Area Water and Sewer Authority  
PO Box 940, Mancelona MI 49659  
Phone: 231-587-0744 Fax: 231-587-0527

MAWSA is an equal opportunity employer and provider



