

October 13, 2016

Mr. Jesse Thyes  
Village of Grafton Administrator  
860 Badger Circle  
Grafton, WI 53024

SUBJECT: Clarification of Continuing Obligations and Property Owner Requirements  
Related to the Final Case Closure  
Tecumseh Products Company, 900 North Street, Grafton, WI 53024  
BRRTS # 02-46-000751 FID # 246009170

Dear Mr. Thyes:

We have been informed that recently Grafton homeowners near the Tecumseh site received letters that they found to be confusing regarding the site's environmental clean-up. One letter was sent by the Wisconsin Department of Natural Resources (DNR), dated August 9, 2016. A second letter, dated August 24, 2016, was sent by TRC Environmental Corporation (TRC), the environmental consultant for Tecumseh. We have received a number of questions from several neighbors of the Tecumseh site that we have addressed in this letter. We will be providing this letter to residents at this evening's meeting, and hope it provides useful information for you, in the event you receive inquiries from Grafton residents.

The DNR would like to apologize for this confusion, and is providing this response to clarify those environmental conditions at the Tecumseh property and responsibilities of any neighbors whose groundwater may be affected by residual groundwater contamination and owners of the three (3) homes where vapor systems were installed. (Refer to the enclosed Figure G-1 Properties Intersecting Groundwater Enforcement Standard Region and the corresponding list of Owners of Affected Properties.) Information on the clean-up at this site can be accessed at:  
<http://dnr.wi.gov/botw/GetActivityDetail.do?adn=0246000751&siteId=606300&crumb=1&search=b>.

It is important for all the neighboring property owners to understand that state law makes it very clear that they are not responsible for contamination that has or may have migrated from the Tecumseh property into the groundwater beneath their properties. Over twenty (20) years of sampling data indicates that concentrations in the groundwater have improved and will continue to improve over time through the natural attenuation processes.

Further, your community's drinking water is provided by the Village of Grafton supplied by a municipal water supply system, which is treated and routinely tested to ensure the water meets federal drinking water standards. As further safeguards, municipal ordinances exist in areas served

by municipal water that require either the abandonment of any existing water supply well or an operations permit. State law requires the DNR to approve the installation or upgrade of any new potable well.

Tecumseh has provided documentation to the DNR to demonstrate that their response efforts meet Wisconsin requirements. This “case closure” documentation was submitted to the DNR on October 5, 2016, and is currently being reviewed by DNR to determine compliance with state laws and standards and to evaluate whether the clean-up is protective of public health, welfare, safety and the environment.

The DNR maintains a database of contaminated sites, to track and provide information about the status of clean up actions. This publicly accessible database, the DNR’s Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the Web may be found at <http://dnr.wi.gov/topic/brownfields/clean.html>. BRRTS information on the clean-up at this site can be found at this specific link:  
<http://dnr.wi.gov/botw/GetActivityDetail.do?adn=0246000751&siteId=606300&crumb=1&search=b>

Please find listed below the questions the DNR received from several neighbors and the DNR’s response to those questions.

---

### **Question/Statement #1**

I am in receipt of correspondence dated August 24, 2016 re: Notification of Remaining Groundwater Contamination and Request for Closure. According to the correspondence, Tecumseh Products Company formerly operated at 900 North Street, Grafton, WI. Its manufacturing process released CVOCs into that property. These same contaminants then polluted many other properties as they migrated from the Tecumseh property to the Milwaukee River. The letter indicates that the primary method for clean-up has been and continues to be natural attenuation.

### **DNR Response**

*Acronym definition from question: CVOCs are Chlorinated Volatile Organic Compounds*

The environmental clean-up of the site has included several soil and groundwater clean-up methods. After clean-up, the primary means of demonstrating that residual contamination in the groundwater is being restored by natural processes is called “monitored natural attenuation.” This recognized method is an established industry standard, and is also allowed as a method of clean-up in state law.

The following is a summary of the clean-up actions at the site (see enclosed map, Figure B.1.b. Detailed Site Map) conducted by Tecumseh Products Company:

### Soil Remediation

- In 2000, 3,900 cubic yards of soil contaminated with Trichloroethylene (TCE) and 1,1,1-Trichloroethane (TCA) located in the east parking lot near the TCA filling area were excavated, thermally treated to remove the contaminants, and replaced on-site.

(An average commercial dump truck holds 10-14 cubic yards, so 3,900 cubic yards required about 275-400 truckloads.)

- In 2003, 150 cubic yards (10-15 truckloads) of contaminated soil were excavated from the west dock area and disposed off-site in a licensed landfill.
- In 2013, a chemical oxidant and catalyst were injected to chemically oxidize and break down the contamination in the shallow soils beneath 15,000 square feet of the Tecumseh building.

#### Groundwater Remediation

- From 2002 to 2007, food grade lactate, mixed with water, was injected below ground in wells and allowed to infiltrate in the west dock, recycling dock, and southeast degreaser areas to promote bio-remediation, resulting in degradation of contaminants in the groundwater, in a process known as reductive dechlorination. During this 5-year period, more than 317,000 gallons of the treatment mixture were injected in the west dock area, and 78,969 gallons were infiltrated into the southeast degreaser and recycling docks area.
- In 2011 and 2012, additional targeted injections occurred in three areas of the east parking lot. An additional 22,205 gallons of lactate solution were injected.
- Monitoring wells were installed around the plant, and in a general southeast (downgradient for groundwater flow) direction to define the contaminant plumes. Twenty-one (21) on-site, and eighteen (18) off-site monitoring wells were installed over the years. The wells (note: not all wells were sampled each time) have been sampled at the site from 1994 to 2016 to demonstrate that the site is meeting the state requirement to have receding and/or stable concentrations of contaminants in the groundwater, a process called monitored natural attenuation.
- In 2013, site work was completed, and the on-site monitoring wells were abandoned with the approval of DNR. At the same time, Tecumseh began installing additional off-site wells.

#### **Question/Statement #2**

Per the correspondence, Tecumseh stopped operations in 2009 and sold the property in 2012. It further indicates that "the CVOC concentrations have decreased over time[.]" When did Tecumseh first become aware that the contamination had spread to the properties identified? Why have I only recently been notified of the existence of the contamination?

#### **DNR Response**

*Acronym definition from question: CVOCs are Chlorinated Volatile Organic Compounds*

In the early 1990s, Tecumseh began upgrading or removing its underground storage tanks to meet new federal storage tank requirements. Chlorinated solvent contamination was discovered during this process in 1993. Shortly thereafter, Tecumseh began a series of investigations of soil and groundwater. From 1994-1995, Tecumseh delivered four (4) letters to the surrounding neighborhood updating the neighbors on the progress of the investigation and clean-up. (Refer to the enclosed letters.) The deep bedrock groundwater investigation was deemed to be complete by

Tecumseh in 1997; however, DNR required Tecumseh to construct one additional bedrock well that was completed in 1999.

Shallow groundwater contamination was discovered by Tecumseh as a result of checking for likely breakdown contaminants in a number of shallow wells along the bike path to the east of the plant in 2013. It was subsequently determined that a shallow plume of contaminated groundwater existed east of the plant that was likely a result of contaminated run-off water from the plant traveling along an old drainage ditch from the 1950s, which was filled years ago. This plume was defined by 2015, and the residences identified at risk for the potential vapor intrusion pathway exposure were contacted by Tecumseh as soon as laboratory data came in, during that investigation from 2013 to 2015.

With respect to information available to the public regarding contaminated sites in Wisconsin, the DNR maintains a database of thousands of sites that have completed or are conducting clean-ups – this database is known as the Bureau of Remediation and Redevelopment Tracking System on the Web (BOTW). BOTW is a comprehensive, on-line database that provides information on contaminated properties and other environmental activities in Wisconsin. The database can be accessed at: <http://dnr.wi.gov/topic/Brownfields/clean.html>.

With respect to specific notification about this site, state law requires a Responsible Party (RP) to notify a property owner at specific points in the clean-up process. For example, RPs are required to notify a property owner if the RP collects samples on a specific, off-site property. Further, state law requires a RP at the time they are proposing case closure to the state to notify property owners if their property meets certain criteria specified in law. Once case closure is approved, the DNR is required to notify a defined set of property owners. Thus, if you were not notified, it is likely because state law did not require the Responsible Party or the state to specifically do so. However, the information regarding this property or others in the state is available on-line or at DNR offices as part of the public record on these sites.

The local newspaper, [Ozaukee County News Graphic](#), published articles about clean-up activities occurring at the Tecumseh site in 1994 and 1996. (Refer to the enclosed articles.)

### **Question/Statement #3**

Today I became aware that a meeting was previously held with regard to these issues. I was unaware of the meeting. How did Tecumseh and the DNR notify impacted homeowners of the meeting? Please provide me an electronic copy of any written notice and proof of delivery.

### **DNR Response**

The DNR sent a letter dated August 9, 2016 to 64 property owners offering one-on-one meetings with DNR and Tecumseh to answer questions. These meetings were offered to take place during the week of August 22, 2016. One homeowner requested a meeting, which was held on August 22. State law specifies who should be notified, as explained in the previous response. It is our understanding since this comment was made, the commenter has clarified that they did receive the DNR letter.

**Question/Statement #4**

Was the Tecumseh property part of the Brownfield Program? If so, did Tecumseh or the subsequent owner receive any financial support for the cleanup as a result of participation in that program? What sort of financial support did it receive?

**DNR Response**

The definition in Wisconsin of a brownfield is abandoned, idle or underused industrial or commercial facilities or sites, the expansion or redevelopment of which is adversely affected by actual or perceived environmental contamination. The Tecumseh property likely meets this definition; however, Tecumseh did not receive any state or federal brownfield funding for the clean-up from the DNR.

**Question/Statement #5**

According to the EPA's website (<https://www.epa.gov/brownfields/brownfield-overview-and-definition>), participation in the Brownfield Program "can increase residential property values 5.1 percent - 12.8 percent near Brownfield sites when cleanup is completed." What is the anticipated property value loss as a result of the contamination before cleanup is completed? What is the anticipated property value loss as result of contamination when cleanup is complete?

**DNR Response**

Everyday DNR is aware of properties with conditions similar to those at the Tecumseh site being bought and sold, including properties bought and sold in the surrounding neighborhood. The Tecumseh site will also be available for redevelopment in the future. These former industrial sites have been redeveloped into valuable assets for their communities. The DNR has witnessed that these redevelopments have consistently had positive impacts on the surrounding neighborhood, with respect to increases in property values and overall neighborhood improvements. A recently released report evaluated the positive impacts of the clean-up and reuse of contaminated sites. A summary of that report and its findings can be found at:

<http://dnr.wi.gov/topic/Brownfields/documents/bsg/uwwEconImpactSum.pdf>.

The DNR has prepared a fact sheet that addresses questions about property value and environmental contamination. If you have additional questions about your property, you should consider working with a qualified, knowledgeable real estate professional – a licensed agent or an attorney – at the time you are ready to sell your property. For additional information, please refer to the DNR fact sheet, "Environmental Contamination & Your Real Estate," available here:

[dnr.wi.gov/files/PDF/pubs/rr/RR973.pdf](http://dnr.wi.gov/files/PDF/pubs/rr/RR973.pdf).

**Question/Statement #6**

How long will the natural attenuation process take before there are no detectable levels of contaminants on my property?

**DNR Response**

Chlorinated solvents are man-made compounds and remain in some form in the environment for many years. Although natural attenuation processes may be effective in reducing the contaminant concentrations, our experience indicates that because of the nature of this type of contaminant, it will require many years to reduce the concentrations to non-detectable levels in groundwater.

Contaminant concentrations in groundwater on your property have been stable or receding and will continue to improve over time through the process of natural attenuation. The groundwater affected by the Tecumseh property is not used as a drinking water source. Your drinking water is provided by the Grafton Water and Wastewater Utility supplied by municipal water supply wells. Water provided by Grafton Water and Wastewater Utility is treated and routinely tested to ensure the water meets federal and state drinking water standards.

**Question/Statement #7**

How did Tecumseh determine which houses would be tested for vapor intrusion? My house was not tested. Why not? How can I be assured that there is no vapor intrusion without testing?

**DNR Response**

The homes located above or near the edge of the shallow groundwater contaminant plume were identified as having potential vapor intrusion risk. Those homes that were closest to the highest concentrations of Trichloroethylene (TCE) contamination in the shallow groundwater had the most risk. Testing began at the homes suspected of having the most likely risk. Sampling was conducted by Tecumseh, under the oversight of DNR, in an area that extended outward from the area of concern and included twenty (20) homes. In addition, the Wisconsin Department of Health and Family Services sampled three (3) additional homes related to the Tecumseh shallow groundwater contaminant plume. Homes above the deeper groundwater plume do not have potential vapor intrusion risk due to the depth of the contaminated groundwater and the ability of the contaminants to volatilize and evaporate into surrounding soils. Thus, only 3 of the 23 homes sampled required a vapor mitigation system to be installed.

**Question/Statement #8**

Is my property now listed on the BRRTS site making public notification of the contamination on my property? If it is not currently on that site, will it be put on it in the future? If so, when? It is my understanding that my property was listed on that site, then removed. According to a Grafton Village official.

**DNR Response**

The Bureau for Remediation and Redevelopment Tracking System (BRRTS) is the DNR's on-line database that provides information about contaminated properties and other activities related to the investigation and clean-up of contaminated soil or groundwater in Wisconsin. Your property is not listed as a site in our BRRTS database.

Once a remediation site is closed, state regulations - Wis. Admin. Code §§ NR 726.05(c) and 726.07(1) - require that the DNR's database include the properties that have residual off-site contamination that meet certain conditions. The case closure package (i.e., a PDF document with the case closure information) will be uploaded to BRRTS, and the relevant closure-related documents will indicate the properties impacted by contamination from the Tecumseh property.

**Question/Statement #9**

If my property is on the BRRTS site, how long will it remain on that site? Is it ever removed from it?

**DNR Response**

An off-site property's status can change in the DNR database if it's shown that the contaminant concentrations in groundwater are below state regulatory standards. For the Tecumseh site, that would mean that the groundwater concentrations no longer meet or exceed the Wis. Admin. Code ch. NR 140 groundwater enforcement standard, or for those properties with a vapor mitigation, that the vapor concentrations are no longer present above action levels which require a vapor mitigation system to be operated.

**Question/Statement #10**

Will I have to disclose the contamination in the event I sell my house? Will subsequent owners have to disclose the contamination?

**DNR Response**

Homeowners – not the State of Wisconsin - are responsible for making those decisions, in accordance with Wis. Stats. §§ 709 and 452, that establish disclosure requirements for property owners. State law requires sellers to disclose any “defects” that would:

- Have a significant adverse effect on the value of the property;
- Significantly impair the health or safety of future occupants of the property; and
- If not repaired, removed or replaced, would significantly shorten or adversely affect the expected normal life of the premises.

A licensed real estate professional or attorney can help you determine whether or not you think your property meets the conditions listed in state law that require disclosure. Thus, the homeowner would need to disclose under these laws if the homeowner, working with your real estate professional, concludes that the environmental situation at the homeowner's property meets the criteria for notification.

For further information on real estate disclosure and environmental contamination, please refer to the DNR fact sheet described in Question #5.

**Question/Statement #11**

What are my specific continuing obligations?

**DNR Response**

It is important for all the neighboring property owners to understand that state law makes it very clear that they are not responsible for contamination that has or may have migrated from the Tecumseh property onto their properties. Many years of sampling data indicates that concentrations in the groundwater have improved and will continue to improve over time through the process of natural attenuation.

Homeowners that have a vapor mitigation system installed will need to inspect and maintain the system until it is no longer needed.

Homeowners whose groundwater is impacted by contaminants that attain or exceed a Wis. Admin. Code ch. NR 140 groundwater enforcement standard will be required to follow the provision of Wis. Admin. Code ch. NR 812 if the homeowner ever installs or replaces a water supply well on their property.

However, your home is provided water through the municipal water supply system, which is routinely tested to ensure the water meets federal and state standards.

**Question/Statement #12**

Why do I have to pay \$700 for a Liability Exemption Letter? As the contaminating party, why isn't Tecumseh paying to have letters provided for each of the contaminated properties?

**DNR Response**

You do not need a Liability Exemption Letter to qualify for the exemption and there is no requirement that you obtain this letter. Wisconsin law provides an exemption from environmental liability to owners of property with contamination that originated from another neighboring property (Wis. Stats. § 292.13). If a property owner requests a liability clarification letter from the DNR, the current review fee is \$700 as required by code.

(In July 2016, Tecumseh paid the review fee to the DNR for an offsite liability exemption letter that was sent to the three homes that require vapor mitigation systems.)

**Question/Statement #13**

The neighbor right behind us (number 30 on Figure 1) was a Vapor Sampling location, what was the level reading for this lot? Why we were not tested. We would like to see a report that shows all testing done at these sites and what their levels were.

**DNR Response**

The response to Question/Statement #7 addresses this concern. The reports and all other documents regarding the project are public records and may be viewed at the DNR Service Center at 1155 Pilgrim Road, Plymouth, Wisconsin. Please call the DNR Project Manager, John Feeney at 920-893-8523 to arrange an appointment. The closure packet submitted by TRC to the DNR on October 5, 2016, on behalf of Tecumseh, can be found online by searching "BRRTS on the Web" at [dnr.wi.gov](http://dnr.wi.gov), then entering BRRTS activity number 02-46-000751 or using this direct download link: <http://dnr.wi.gov/botw/DownloadBlobFile.do;jsessionid=TLMhX3nYnwPF9cVKC331Gy47TmPdjljT8x4FnhBj6cL8vtnHhnGv!2013480397?docSeqNo=55186>

**Question/Statement #14**

How deep does the contamination go? Can it rise?

**DNR Response**

The narrow, shallow groundwater plume has contamination at the groundwater table at 10 to 15 feet below ground surface. The deep groundwater plume extends to about 200 feet below ground surface. Based on over 20 years of groundwater monitoring of the contaminants, the deep contamination does not appear to be rising. Part of the contaminant plume naturally flows into the



Milwaukee River. Tecumseh has monitored and determined that the flow of contaminants into the river is within DNR surface water and health standards.

**Question/Statement #15**

How do we know that the plume won't continue to move?

**DNR Response**

Over 20 years of groundwater monitoring of the contaminant concentrations in groundwater and documentation of groundwater flow patterns have been evaluated by Tecumseh and submitted to the DNR. Case closure is based, in part, on the available evidence to confirm that contamination is stable and/or receding in the groundwater in accordance with Wis. Admin. § ch. NR 726.

**Question/Statement #16**

If we decide to do an addition or if our house would burn down, will we be able to add on or rebuild the house if it sits on contaminated soil?

**DNR Response**

Yes, the issues associated with the off-site contamination should not affect your property use as proposed above. Laboratory analysis results of collected soil samples, specifically associated with former manufacturing processes at Tecumseh, indicate that contaminated soil does not extend beyond the former Tecumseh property.

**Question/Statement #17**

If we have to disclose that this house sits on contaminated land when we sell and the buyer is requesting soil testing done, who is paying for this test?

**DNR Response**

Disclosure of the contamination associated with the groundwater plume is a decision the property owner makes, not the state. Please refer to the response to Question #10 for more information. Laboratory data does not indicate that contaminated soil associated with former manufacturing processes at Tecumseh extends beyond the former Tecumseh property. Voluntary sampling at a property in the future is a private party real estate transaction issue between the buyer and the seller.

**Question/Statement #18**

Furthermore, how do we know that these contamination levels that are safe now will still be considered safe in 5, 10, 20 years from now? State Statute changes all the time, what guarantees do we have that Tecumseh or TRC Solutions will pay for any additional cleanup that maybe needed in the future?

**DNR Response**

This property has had extensive testing, treatment, and monitoring over decades. The DNR will conduct a review to determine if the information provided to the state is sufficient to determine that the state understands the nature and extent of the contamination, and that the clean-up is protective of public health, welfare, safety and the environment. The DNR may reopen a case if it becomes apparent that there is a threat to public health or the environment based on new information or circumstances. If the case is reopened, state law requires that the causer, or person in possession or

control of the former Tecumseh property would be responsible for completing any additional assessment or remediation. The DNR has issued case closure for 18,248 environmental contamination cases and has only reopened 84 cases.

**Question/Statement #19**

Let this email show that we do not accept the August 24, 2016 terms on your letter and our file should not be closed until we have reached a suitable solution to this problem.

**DNR Response**

The DNR cannot legally require Tecumseh to perform work not required by state law, specifically Wis. Stats. § 292 and in the Wis. Admin. § NR 700 rule series. In order to affect DNR's case closure consideration, the DNR needs a submittal that presents a specific technical or legal argument as to how the case does not meet applicable laws. Opposition to the clean-up without a relevant technical or legal argument is not sufficient reason for denial of case closure by the state. The DNR has agreed to extend the date by which people can submit specific comments regarding the closure review until November 25, 2016. Please submit all public comments regarding case closure by writing or emailing the DNR project manager:

John Feeney  
Remediation and Redevelopment Program  
Wisconsin Department of Natural Resources  
1155 Pilgrim Road  
Plymouth, WI 53073  
or  
johnm.feeney@wisconsin.gov

In closing, I hope that this letter has provided more clarity to the situation regarding the clean-up at the former Tecumseh site. The DNR would like to support the Village of Grafton in making this property ready for redevelopment and becoming a new asset for your community and surrounding neighborhood. If you have any additional questions, please contact John Feeney, the DNR project manager at 920-893-8523.

Sincerely,



Michele R. Norman  
Program Supervisor  
Remediation and Redevelopment – SER

cc: Darsi Foss, DNR  
John Feeney, DNR  
Jason Smith, Tecumseh  
Tom Stolzenburg, TRC

Enclosures:

- Figure G-1 Properties Intersecting Groundwater Enforcement Standard Region and the corresponding list of Owners of Affected Properties
- Figure B.1.b. Detailed Site Map
- Letters delivered by Tecumseh from 1994-1995 to the surrounding neighborhood updating neighbors on the progress of the investigation and clean-up. Dated: Nov. 9, 1994; Mar. 17, 1995; July 10, 1995; and Aug. 8, 1995.
- Ozaukee County News Graphic articles from Nov. 14, 1994 and Feb. 15, 1996.



**LEGEND**

- FORMER TPC FACILITY PROPERTY BOUNDARY
- VAPOR SAMPLING LOCATION
- RESIDENCE WITH VAPOR MITIGATION SYSTEM INSTALLED
- SHALLOW WATER TABLE ES EXTENT
- BEDROCK WATER TABLE ES EXTENT
- PARCEL INTERSECTING ES EXTENT (WITH INDEX NUMBER)
- OTHER PARCEL

**NOTES**

1. AERIAL PHOTOGRAPHY FROM OZAUKEE COUNTY, 2015.
2. SUB-SLAB VAPOR SAMPLED COLLECTED 11/6/2013 TO 3/10/2015.
3. THE ES EXTENT IS AN AREA ENCLOSING ALL RESULTS FOR ANY PARAMETER EXCEEDING ITS ENFORCEMENT STANDARD (ES) LEVEL BASED ON MAY 2015 SAMPLING DATA.



|   |               |                         |  |
|---|---------------|-------------------------|--|
| <b>PROJECT: FORMER TECUMSEH PRODUCTS COMPANY<br/>BRRTS #02-46-000751<br/>GRAFTON, WI</b>    |               |                         |  |
| <b>SHEET TITLE:<br/>PROPERTIES INTERSECTING<br/>GROUNDWATER ENFORCEMENT STANDARD REGION</b> |               |                         |  |
| DRAWN BY: J PAPEZ   | SCALE:        | PROJ. NO. 218034        |  |
| CHECKED BY: A SCHROEDER   | AS NOTED      | FILE NO. 216034-051.mxd |  |
| APPROVED BY: J RICE   | DATE PRINTED: | <b>Figure G-1</b>       |  |
| DATE: AUGUST 2016   |               |                         |  |



708 Heartland Trail, Suite 3000  
Madison, WI 53717  
Phone: 608.826.3600  
www.trcsolutions.com



Table G.1  
 Notifications to Owners of Affected Properties  
 Tecumseh Products Co, Grafton, Wisconsin  
 BRRTS Project #02-46-000751

| NO.                                      | PROPERTY OWNER                             | PROPERTY ADDRESS                 | MAILING ADDRESS                                      | ES INTERSECTION | PARCEL ID    | TYPE OF PROPERTY OWNER | PROPERTY CENTER POINT EASTING (WTM, m) | PROPERTY CENTER POINT NORTHING (WTM, m) | RESIDUAL GROUNDWATER CONTAMINATION = OR > ES | RESIDUAL SOIL CONTAMINATION EXCEEDS RCLs | MONITORING WELLS: NOT ABANDONED | MONITORING WELLS: CONTINUED MONITORING | COVER/ BARRIER/ ENGINEERED CONTROL | STRUCTURAL IMPEDIMENT | INDUSTRIAL RCLs MET/APPLIED | VAPOR MITIGATION SYSTEM (VMS) | DEWATERING SYSTEM NEEDED FOR VMS | COMPOUNDS OF CONCERN IN USE | COMMERCIAL/ INDUSTRIAL VAPOR EXPOSURE ASSUMPTIONS APPLIED | RESIDUAL VOLATILE CONTAMINATION POSES FUTURE RISK OF VAPOR INTRUSION | SITE SPECIFIC SITUATION |
|--|--|----------------------------------|--|-----------------|--------------|------------------------|--|---|--|--|---------------------------------|--|------------------------------------|-----------------------|-----------------------------|-------------------------------|----------------------------------|-----------------------------|---|--|-------------------------|
| 58                                       | Elaine R Hale                              | 977 14th Ave                     | 977 14th Ave, Grafton, WI 53024                      | Deep            | 101000216000 | APO                    | 686,260                                | 318,854                                 | X  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
| 59                                       | Jared Bublitz                              | 983 14th Ave                     | 983 14th Ave, Grafton, WI 53024                      | Deep            | 101000215000 | APO                    | 686,250                                | 318,834                                 | X  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
| 60                                       | Kelly L Kabitzke                           | 1320 North St                    | 1320 North St, Grafton, WI 53024                     | Deep            | 101000214000 | APO                    | 686,242                                | 318,814                                 | X  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
| 61                                       | Eric W & Nicole M Jarman                   | 990 14th Ave                     | 990 14th Ave, Grafton, WI 53024                      | Deep            | 101000313000 | APO                    | 686,378                                | 318,821                                 | X  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
| 62                                       | Thomas L & Katrina M Christensen           | 1327 North St                    | 1327 North St, Grafton, WI 53024                     | Deep            | 100500103000 | APO                    | 686,315                                | 318,786                                 | X  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
| 63                                       | Richard P & Kelly M Rieck                  | 1321 North St                    | 1321 North St, Grafton, WI 53024                     | Deep            | 100500103003 | APO                    | 686,248                                | 318,776                                 | X  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
| 64                                       | James & Coleen Steffen                     | 1002 13th Ave                    | 1002 13th Ave, Grafton, WI 53024                     | Shallow         | 100600901001 | APO                    | 686,205                                | 318,784                                 | X  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
| 65                                       | Robert S Henckel                           | 1006 13th Ave                    | 1006 13th Ave, Grafton, WI 53024                     | Shallow         | 100600902000 | APO                    | 686,206                                | 318,764                                 | X  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
| 66                                       | Sean M & Amanda M Kilpatrick               | 1012 13th Ave                    | 1012 13th Ave, Grafton, WI 53024                     | Shallow         | 100500103001 | APO                    | 686,273                                | 318,747                                 | X  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
| 67                                       | Sean M & Amanda M Kilpatrick               | 1012 13th Ave                    | 1012 13th Ave, Grafton, WI 53024                     | Shallow         | 100600903000 | APO                    | 686,197                                | 318,744                                 | X  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
| 68                                       | Sharon & Joseph Volkmann                   | 1018-1020 13th Ave               | PO Box 214, Grafton, WI 53024                        | Shallow         | 100600904000 | APO                    | 686,197                                | 318,724                                 | X  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
| 69                                       | Richard Vey                                | 1026 13th Ave                    | 1026 13th Ave, Grafton, WI 53024                     | Shallow         | 100500104000 | APO                    | 686,252                                | 318,712                                 | X  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
| 70                                       | Richard Vey                                | 1026 13th Ave                    | 1026 13th Ave, Grafton, WI 53024                     | Shallow         | 100600904001 | APO                    | 686,198                                | 318,705                                 | X  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
| 71                                       | Village of Grafton                         | 1034 13th Ave                    | 860 Badger Circle, Grafton, WI 53024                 | Shallow         | 100600905001 | APO/ROWH               | 686,199                                | 318,684                                 | X  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
| 72                                       | Village of Grafton                         | 1036 13th Ave                    | 860 Badger Circle, Grafton, WI 53024                 | Shallow         | 100500105000 | APO/ROWH               | 686,212                                | 318,667                                 | X  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
| 73                                       | Village of Grafton                         | 1062 13th Ave                    | 860 Badger Circle, Grafton, WI 53024                 | Deep            | 100500106000 | APO/ROWH               | 686,212                                | 318,646                                 | X  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
| 74                                       | Village of Grafton, Veterans Memorial Park | 1062 13th Ave                    | 860 Badger Circle, Grafton, WI 53024                 | Deep            | 101080201000 | APO/ROWH               | 686,216                                | 318,568                                 | X  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
| RIGHTS-OF-WAY                            |  |                                  |  |                 |              |                        |  |   |  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
|  | Ozaukee County, Village of Grafton         | County Road O/N Green Bay Avenue | PO Box 994, Port Washington, WI 53074                | Deep            | N/A          | ROWH                   | N/A                                    | N/A                                     | X  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
|  | Village of Grafton                         | Claern Court                     | 860 Badger Circle, Grafton, WI 53024                 | Deep            | N/A          | ROWH                   | N/A                                    | N/A                                     | X  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
|  | Village of Grafton                         | North Street                     | 861 Badger Circle, Grafton, WI 53024                 | Deep            | N/A          | ROWH                   | N/A                                    | N/A                                     | X  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
|  | Village of Grafton                         | 11th Avenue                      | 862 Badger Circle, Grafton, WI 53024                 | Shallow         | N/A          | ROWH                   | N/A                                    | N/A                                     | X  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
|  | Village of Grafton                         | 13th Avenue                      | 863 Badger Circle, Grafton, WI 53024                 | Deep            | N/A          | ROWH                   | N/A                                    | N/A                                     | X  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
|  | Village of Grafton                         | 14th Avenue                      | 864 Badger Circle, Grafton, WI 53024                 | Shallow         | N/A          | ROWH                   | N/A                                    | N/A                                     | X  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
| SOURCE PROPERTY - NOT NUMBERED ON FIGURE |  |                                  |  |                 |              |                        |  |   |  |  |                                 |  |                                    |                       |                             |                               |                                  |                             |   |  |                         |
|  | BLWL, LLC, c/o Phoenix Investors, LLC      | 900 North St                     | 401 E. Kilbourn Ave., Suite 201, Milwaukee, WI 53202 | Shallow         | 100400002000 | SPO                    | 685,833                                | 318,959                                 | X  | X  | X                               |  | X                                  | X                     | X                           |                               |                                  |                             | X   |  |                         |

Notes:  
 1. See Figure G.1 for property locations.

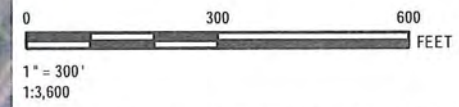


**LEGEND**

- FORMER TPC FACILITY PROPERTY BOUNDARY
- VAPOR SAMPLING LOCATION
- RESIDENCE WITH VAPOR MITIGATION SYSTEM INSTALLED
- RESIDENCE WITH VAPOR MITIGATION SYSTEM INSTALLED BUT OPERATION NOT REQUIRED (NOTE 5)
- UNCONSOLIDATED AQUIFER ES EXTENT
- BEDROCK AQUIFER ES EXTENT
- PARCEL INTERSECTING ES EXTENT
- OTHER PARCEL
- CAP AREA TO BE MAINTAINED
- APPROXIMATE EXTENT OF SOIL IMPACTS BASED ON SITE INVESTIGATION AND REMEDIATION DATA
- WATER TABLE MONITORING WELL LOCATION
- BEDROCK MONITORING WELL LOCATION
- GROUNDWATER FLOW DIRECTION

**NOTES**

1. AERIAL PHOTOGRAPHY FROM OZAUKEE COUNTY, 2015.
2. SUB-SLAB VAPOR SAMPLE COLLECTED 11/6/2013 TO 3/10/2015.
3. THE ES EXTENT IS AN AREA ENCLOSING ALL RESULTS FOR ANY PARAMETER EXCEEDING ITS ENFORCEMENT STAND ARD (ES) LEVEL BASED ON JULY 2016 SAMPLING DATA.
4. SEE TABLE G.1 FOR ADDRESSES, OWNERS, AND PARCEL NUMBERS OF AFFECTED PROPERTIES.
5. A VAPOR MITIGATION SYSTEM WAS INSTALLED, BUT A SUBSEQUENT CHANGE IN THE SUB-SLAB SCREENING LEVELS USED BY WDNR MEANS THE SYSTEM IS NO LONGER REQUIRED.



|   |                |               |                |
|---|----------------|---------------|----------------|
| PROJECT: FORMER TECUMSEH PRODUCTS COMPANY |                |               |                |
| BRRTS #02-46-000751                       |                |               |                |
| GRAFTON, WI                               |                |               |                |
| SHEET TITLE:                              |                |               |                |
| DETAILED SITE MAP                         |                |               |                |
| DRAWN BY:                                 | PAPEZ J        | SCALE:        | PROJ. NO.      |
| CHECKED BY:                               | A SCHROEDER    | AS NOTED      | 216034         |
| APPROVED BY:                              | T STOLZENBURG  | DATE PRINTED: | FILE NO.       |
| DATE:                                     | SEPTEMBER 2016 |               | 216034-056.mxd |
|   |                |               | FIGURE B.1.b   |



708 Heartland Trail, Suite 3000  
 Madison, WI 53717  
 Phone: 608.826.3600  
 www.trcsolutions.com



# TECUMSEH PRODUCTS COMPANY

ENGINE AND TRANSMISSION GROUP

GRAFTON OPERATIONS

900 NORTH STREET  
GRAFTON, WISCONSIN 53024-1499

PHONE: 414-377-2700  
FAX: 414-377-4485

November 9, 1994

Dear Neighbor:

As long-time members of the Grafton community, Tecumseh Products Company (Tecumseh) is interested in keeping our neighbors informed about activities at our facility. This letter will bring you up-to-date on some activities we are undertaking with regard to groundwater.

Tecumseh is in the process of conducting a site investigation of our Grafton facility, due to evidence of solvents found in on-site soils and groundwater at the plant. These solvents were discovered while we were removing underground storage tanks as part of our proactive environmental management program. We are conducting some off-site groundwater sampling as a precautionary measure to determine if any migration of these solvents has occurred, and what, if any, remedial action may need to be taken.

Residents in the area use the Grafton Village water system which is tested in accordance with State requirements. Further, we believe the water meets all state water quality criteria. Therefore, we do not believe potential off-site migration poses any current concern to residential drinking water supplies.

This effort is being undertaken with the knowledge and approval of the Wisconsin Department of Natural Resources. In addition, we have informed the appropriate Village officials of our efforts. Tecumseh has assembled a team of recognized specialists to investigate the situation. Our team of specialists will install monitoring wells and conduct periodic inspection at two locations on 14th Avenue between North Street and Shoreland Lane. The well installation process will take between two to six days. The planned locations for the work include two locations in the Village right-of-way on 14th Avenue. Construction will occur during working hours, from 7:00 a.m. to 5:00 p.m. Our specialists will do their best to minimize potential disruption to residents.

The installation of monitoring wells requires the operation of heavy machinery. Residents can expect to see a large drill truck, accompanied by several smaller support trucks. It is possible that part of 14th Avenue may be blocked-off to accommodate the machinery. When the work is completed, Tecumseh will restore any impacts to the Village right-of-way property and remove any debris that may have resulted from construction.



November 9, 1994

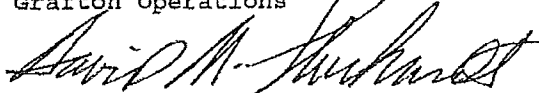
Page -2-

We will be hand-delivering copies of these letters on Wednesday, November 9. We will answer any questions you may have at that time. If you have any questions or would like more information, please contact Kerry DeKeyser collect at (414) 898-5711 or me at (414) 377-2700.

Thank you very much for your cooperation.

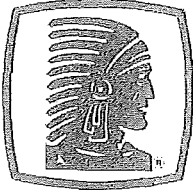
Sincerely,

TECUMSEH PRODUCTS COMPANY  
Engine and Transmission Group  
Grafton Operations



David M. Eberhardt  
Operations Manager

DME/cjr



# TECUMSEH PRODUCTS COMPANY

ENGINE AND TRANSMISSION GROUP  
GRAFTON OPERATIONS

900 NORTH STREET  
GRAFTON, WISCONSIN 53024-1499

PHONE: 414-377-2700  
FAX: 414-377-4485

March 17, 1995

Dear Neighbor:

As a long-time member of the Grafton community, Tecumseh Products Company (Tecumseh) is interested in keeping our neighbors informed about activities at our facility. In November 1994, we sent you a letter notifying you of efforts we were undertaking in your neighborhood regarding our groundwater investigation. The purpose of this letter is to bring you up-to-date on the status of the investigation.

As you may recall, Tecumseh is in the process of conducting an investigation of our facility due to evidence of volatile organic compounds (VOCs) found in soils and groundwater at the plant. These VOCs were discovered during the removal of underground petroleum storage tanks as part of our proactive environmental management program. As part of our investigation, we installed two groundwater monitoring wells on 14th Avenue between North Street and Shoreland Lane to help us characterize subsurface conditions.

In December 1994, we concluded our preliminary investigation on 14th Avenue. The results of that investigation indicate the groundwater in your area is not affected by site-related materials. To help us characterize potential on- and off-site sources of VOCs and the extent of affected groundwater, we have proposed to the Wisconsin Department of Natural Resources (WDNR) to conduct additional sampling this spring of groundwater and soils at our facility and in areas nearby.

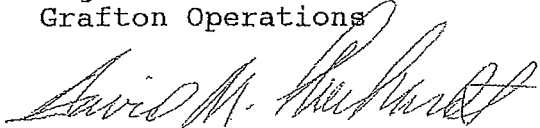
In the event that we need to conduct further studies in your area, we will contact you to ensure that you are fully informed of our efforts. As we indicated in our previous letter, Tecumseh is committed to restoring any impacts to your yard that may have occurred as a result of the installation of our monitoring wells.

Neighbor  
March 17, 1995  
Page -2-

Again, I appreciate your cooperation in this matter. If you have any questions or would like more information, please contact Kerry DeKeyser collect at (414) 898-5711 or me at (414) 377-2700 between 8:30 a.m. and 5:00 p.m.

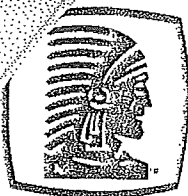
Sincerely,

TECUMSEH PRODUCTS COMPANY  
Engine and Transmission Group  
Grafton Operations



David M. Eberhardt  
Operations Manager

DME/cjr



# TECUMSEH PRODUCTS COMPANY

ENGINE AND TRANSMISSION GROUP

GRAFTON OPERATIONS

900 NORTH STREET  
GRAFTON, WISCONSIN 53024-1499

PHONE: 414-377-2700  
FAX: 414-377-4485

July 10, 1995

Dear Neighbor:

As a long-time member of the Grafton community, Tecumseh Products Company (Tecumseh) is interested in keeping our neighbors informed about activities at our facility. Some of you already may have heard from us regarding some activities we undertook in conjunction with the Wisconsin Department of Natural Resources (WDNR) as part of a groundwater investigation on 14th Avenue in November 1994. This letter will bring you up-to-date on some additional activities associated with that same investigation.

As you may know, Tecumseh has been investigating groundwater quality at and near our Grafton facility due to evidence of volatile organic compounds (VOCs) found in soils and groundwater at the facility. These VOCs were discovered during the removal of underground petroleum storage tanks as part of our proactive environmental management program. We are conducting off-site groundwater sampling to determine if the VOCs have migrated off-site and what, if any, remedial action may need to be taken.

Already, we have tested groundwater at two locations on 14th Avenue. The results of these tests do not indicate the presence of site-related materials. In addition, we sampled some private residential wells in the Town of Grafton near the plant. The results of those tests indicate that VOC levels are within state and federal health-based drinking water standards for the substances tested. In addition, residents in the Village use the Grafton Village water supply system that is tested in accordance with state and federal requirements. Therefore, we do not believe groundwater conditions at the plant currently pose any reason for concern to residents using municipal drinking water supplies.

We are, however, working to attempt to further define the extent of potential VOC migration. To that end, we are undertaking tests to the southeast and west of the plant. New monitoring wells will be installed in the Village right-of-way at two locations on 13th Avenue between Washington Street and Shoreland Lane. As appropriate, these wells may be tested at some point in the future. Weather permitting, our work on 13th Avenue will begin on July 24, 1995, and each well will take between seven to ten days to install.

In addition, a soil boring will be installed and tested in the Village right-of-way on 8th Avenue between Power and Elm Streets. Depending on the results from that boring, we may drill additional borings in the Village right-of-ways on 6th and 7th Avenues, between Power and Elm Streets. Weather permitting, our work on 8th Avenue will begin around the first week of August. Each soil boring will take approximately one day.

The installation of monitoring wells and soil borings will require the operation of heavy machinery. During construction hours, residents can expect to see a large drill truck and several smaller support trucks. It is possible that 13th Avenue and part of 8th Avenue (and 6th and 7th Avenues, if borings are installed there as well) may be blocked off temporarily to accommodate the machinery. Construction will occur during working hours, from 8:00 a.m. to 6:00 p.m. In addition, our crews will be on-site for one hour before and two hours after construction activities performing routine set-up and breakdown activities.

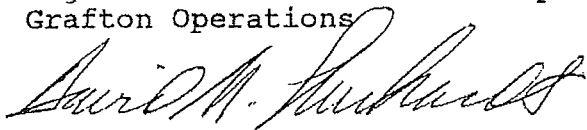
During the course of the work, we will do our best to minimize any disruptions to residents. I want to assure you that Tecumseh Products and its contractors will clean up the drill cuttings, restore any impacts caused by the drill rig and support vehicles, repair grass, or fix any other disturbance to your lawn caused by the well installation activities.

We appreciate your cooperation in this matter and will continue to keep you informed of our efforts. In addition, we will continue to keep the appropriate Village officials informed. If you would like more information, materials related to the investigation are located in the personnel office at the Tecumseh facility. You are welcome to examine these documents between the hours of 7:00 a.m. and 4:30 p.m. Finally, if you have any questions, please contact me at 377-2700 or Kerry DeKeyser at 414-898-5711 between 8:30 a.m. and 4:00 p.m.

Again, thank you very much for your cooperation.

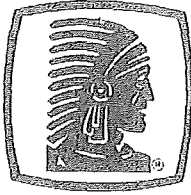
Sincerely,

TECUMSEH PRODUCTS COMPANY  
Engine and Transmission Group  
Grafton Operations



David M. Eberhardt  
Operations Manager

DME/cjr



# TECUMSEH PRODUCTS COMPANY

ENGINE AND TRANSMISSION GROUP  
GRAFTON OPERATIONS

900 NORTH STREET  
GRAFTON, WISCONSIN 53024-1499

PHONE: 414-377-2700  
FAX: 414-377-4485

August 8, 1995

Dear Neighbor:

As a long-time member of the Grafton community, Tecumseh Products Company (Tecumseh) is interested in keeping our neighbors informed about activities at our facility. As you may know, Tecumseh has been working with the Wisconsin Department of Natural Resources to investigate groundwater quality at and near our Grafton facility due to evidence of volatile organic compounds (VOCs) found in on-site soils and groundwater. These VOCs were discovered during the removal of underground petroleum storage tanks as part of our proactive environmental management program. We are conducting off-site groundwater sampling measures to determine if the VOCs have migrated off-site and what, if any, remedial action may need to be taken. This letter will bring you up-to-date on some activities associated with that investigation.

Already, we have tested groundwater at two locations on 14th Avenue. The results of these tests do not indicate the presence of site-related materials. We also sampled some private residential wells in the Town of Grafton near the plant. The results of those tests indicate that VOC levels are within state and federal health-based drinking water standards for the substances tested. In addition, residents in the Village use the Grafton Village water supply system that is tested in accordance with state and federal requirements. Therefore, we do not believe groundwater conditions at the plant currently pose any reason for concern to residents using municipal drinking water supplies.

We are, however, working to attempt to further define the extent of potential VOC migration. To that end, we are undertaking tests to the southeast and west of the plant. New monitoring wells recently have been installed at two locations on 13th Avenue between Washington Street and Shoreland Lane and a soil boring has been installed in the Village right-of-way on 8th Avenue between Power and Elm Streets. We also will be installing two soil borings east of the Milwaukee River: one on Sunset Court and another in the East Side Community Park, south of Washington Avenue and east of 17th Avenue. The work on the east side of the river is expected to begin around the third week of August.

Neighbor  
August 8, 1995  
Page -2-

The installation of monitoring wells and soil borings will require the operation of heavy machinery. During construction hours, residents can expect to see a large drill truck and several smaller support trucks. Construction will occur during working hours, from 8:00 a.m. to 6:00 p.m. In addition, our crews will be on-site for one hour before and up to two hours after construction activities performing routine set-up and breakdown activities.

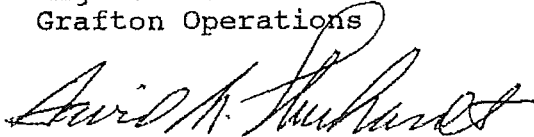
During the course of the work, we will do our best to minimize any disruptions to residents. I want to assure you that Tecumseh and its contractors will clean up the drill cuttings, restore any impacts caused by the drill rig and support vehicles, repair grass, or fix any other disturbance to your lawn in the Village right-of-way caused by the well installation activities.

We appreciate your cooperation in this matter and will continue to keep you informed of our efforts. In addition, we will continue to keep the appropriate Village officials informed. If you would like more information, materials related to the investigation are located in the personnel office at the Tecumseh facility. You are welcome to examine these documents between the hours of 7:00 a.m. and 4:30 p.m. Finally, if you have any questions, please contact me at 377-2700 or Kerry DeKeyser at 414-898-5711 between 8:30 a.m. and 4:00 p.m.

Again, thank you very much for your cooperation.

Sincerely,

TECUMSEH PRODUCTS COMPANY  
Engine and Transmission Group  
Grafton Operations



David M. Eberhardt  
Operations Manager

DME/cjr

## Happy with Cedarburg budget

Holly Gray

The Common Council continued to discuss the 1995 city budget Monday, again making an effort to lessen the impact it would have on

the crowd was small in numbers, those at the hearing spoke loud and clear.

"We need to be thinking more like a business," city resident John Duffy said.

Duffy suggested the city is going in the opposite direction of most businesses. Most companies, he said, normally look at their expected income and then set expenditures. The city looks at what it wants to spend and then socks the taxpayer, Duffy said.

"That's gotta stop sometime," he said, suggesting the city use more private contractors for services.

Resident Edward Straszewski outlined a nine-step plan he suggested the city follow because of the current

and future debt service the city is facing.

Among the suggestions is implementing a freeze on hiring city employees; developing a capital-improvement spending moratorium on any item that would not be considered necessary for the safety and well-being of city residents; reducing the 1995 capital-improvement budget and calling for a 10 percent reduction in expenses by departments in 1995; and developing an employee incentive program.

City resident Jim Konowalski told the council it may need to examine what the city's budget targets are and what they need to be. The 3 percent target for expenditure increases by departments may have been wrong, he said.

Konowalski said the city can't have everything on its wish list. "Just say no," he told council members.

Council Member Arthur Filter called for a reduction

See CEDARBURG on Back Page

## Tecumseh trying to track groundwater contamination

Grafton — Tecumseh Products Co. is drilling test wells at two 14th Avenue locations this week to determine whether contaminated groundwater found at the company site has migrated elsewhere.

The Grafton company is working with the Department of Natural Resources and a private environmental consulting firm to track the contamination, according to Dave Eberhardt, Tecumseh operations manager.

Tecumseh is continuing to drill monitoring wells at its plant site and began drilling two wells on 14th Avenue Monday. The 14th Avenue wells, located on village-owned right-of-way, are situated near the intersections with North Street and Shoreland Lane. Both sites are east of the company—the direction of groundwater flow in the area.

The removal of several underground storage tanks

that were no longer in use at Tecumseh led to the groundwater testing, Eberhardt said.

Contamination was discovered around a leaking tank, but that particular tank was not used to store the solvents that would have caused the contamination, he said.

Tecumseh is now trying to track the path of the contaminants, which apparently migrated to the tank site from elsewhere on the company grounds. Solvents were used as degreasers when the company was still assembling engines at the Grafton facility, Eberhardt said. The assembly work is no longer done in Grafton.

Contamination from the solvents has been detected in the soil and the groundwater at the Tecumseh site, prompting the 14th Avenue monitoring wells, according to Eberhardt.

See TECUMSEH on Back Page

director of water resources for Northern Environmental told the committee.

Of greatest concern is the east wall of sluiceway, which is "structurally unsound and a crack in the top of the dam that is about and at least four feet deep, Johnson said.

Water entering the crack and freezing could be deteriorating the interior of the dam. If the structure is repaired, borings should be determined to determine the condition of the concrete interior, according to Johnson.

A section along the top of the dam's west side to have already failed—most of the water in the dam is flowing through that section, Johnson said.

Engineers were unable to locate any permeability that would indicate the notch in the west end was put there intentionally, he said.

"Perhaps it just failed naturally," Johnson said.

Northern Environmental has estimated

See VILLAGE of

am

any responsibility at commitment the sharing in the cost of administrator Darrell

of the cost of dam ed for funding, but

ities are eligible to

determined, a dam case the DNR will

structure. Milwaukee River at the Falls Road

Look for a  
special  
NEWS  
GRAPHIC  
OFFER  
INSIDE

ed at Tecumseh— detected in the

own its North Street. Tecumseh, in 1982 ation.

udget

aged the council to treet sweeper, while budget.

was made possible vious budget draft.

d with Kuerschner's er from the budget. t Monday for final



# Village takes serious look at troubled dam

Continued from Front Page

repairing the dam itself at \$237,000. The cost includes construction of a gate in the sluiceway section on the west end of the dam to control water flow.

If the dam is repaired, engineers are still recommending the east sluiceway wall—which is severely deteriorated in some sections—be removed at an additional cost of \$27,000, Johnson said.

The cost of removing both the dam and the east sluiceway wall is estimated at \$177,000.

Trustee Al Schlecht expressed the sentiments of several riverfront residents attending the meeting when he asked what would happen if no action was taken on the dam.

"Why not leave it alone?" Schlecht said. "It has been there 100 years. It's the best thing for the taxpayers, whether we pay for it or the state pays for it. How do we

get them (the DNR) to leave it alone?"

There is no way of knowing how long the dam and sluiceway could remain intact without repair, Johnson said.

"The dam could go tomorrow—it could go in 50 years. We just don't know," he said.

Dam owners are responsible for upkeep of the structures, but ownership of the Chair Factory Dam is currently a matter of dispute.

The DNR has identified the village, three property owners and a private trust as owners of the dam, but the parties involved are contesting their ownership. All five parties own property adjacent to the dam.

The DNR has ordered the alleged owners to repair or remove the structure.

Schlecht suggested the village ask to meet with DNR officials who have some decision-making power re-

garding the dam.

While the village has not accepted any responsibility for the dam, it should find out what commitment the DNR is willing to make in terms of sharing in the cost of dam repairs, agreed Village Administrator Darrell Hofland.

The DNR will pay 50 percent of the cost of dam repairs for projects that are approved for funding, but only municipalities or other taxing entities are eligible to apply for the funds.

If ownership of a dam cannot be determined, a dam can be declared abandoned, in which case the DNR will pay the full cost of removing the structure.

The Chair Factory Dam spans the Milwaukee River on the village's southeast side, near the Falls Road bridge.

# Tecumseh testing for groundwater contamination

Continued from Front Page

Company officials distributed a letter door-to-door to residents on 13th and 14th avenues last week to explain the purpose of the 14th Avenue wells, Eberhardt said.

The wells will be 40 to 60 feet deep initially. The soil borings, as well as groundwater, will be tested for

contamination. If any contamination is detected, the wells will be drilled deeper, Eberhardt said.

Because village residents receive water from the village water utility rather than private wells, any groundwater contamination in the area would not affect homeowners' drinking water.

One of the contaminants detected at Tecumseh—trichloroethylene (TCE)—has been detected in the village's water supply.

The village water utility shut down its North Street well, located across the street from Tecumseh, in 1982 due to high levels of TCE contamination.

# Cedarburg keeps jousting with proposed 1995 budget

Continued from Front Page

in the budget. "Here's what I understand," he said holding up his wallet.

Council Member Kit Keller said as with any family, the city needs to tighten its belt. That means, she warned, that city residents should be prepared for a cut in services.

"That's painful," Keller admitted.

She said she is very concerned with the effect the budget could have on businesses and senior citizens.

Several council members gave suggestions on where

to make cuts. It was ultimately decided to fund anticipated environmental expenses at 64 percent instead of 100 percent of the \$235,000 needed.

The council decided to delete the cost of a street sweeper from the capital-improvement budget (about \$46,000) and place \$24,000 in the operating budget for contracted street sweeping. That move would save about \$22,000.

The council also decided to direct City Administrator Clint Gridley to find \$30,000 in cuts to expenditures in

the budget.

Mayor John Kuerschner encouraged the council to rethink its position on deleting the street sweeper, while keeping a new police officer in the budget.

The officer position in the budget was made possible through cutting \$21,000 from a previous budget draft.

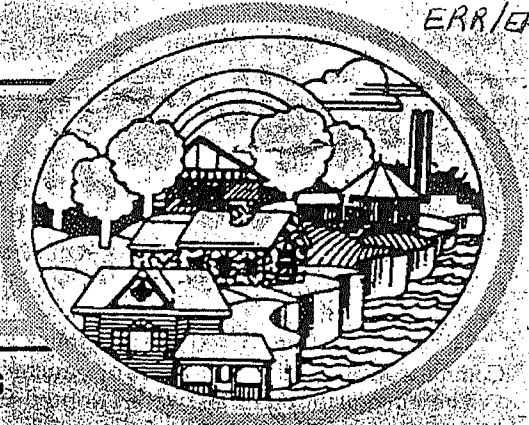
Only two council members agreed with Kuerschner's desire to delete the new police officer from the budget.

The council will meet again next Monday for final budget adoption.

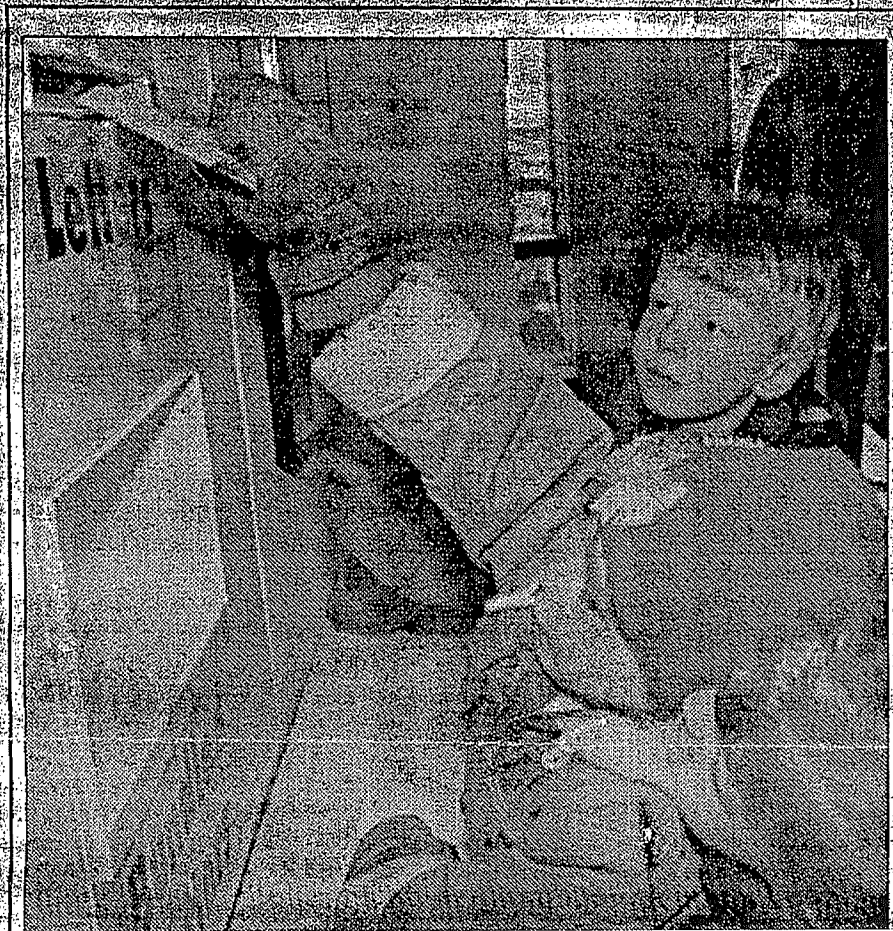
FID 242009170  
ERR/ERP

OZAUKEE COUNTY

# NEWS GRAPHIC



THURSDAY, FEBRUARY 15, 1996 VOL. 113 NO. 8 1 SECTION/36 PAGES 75 CENTS



## Self-directed Tecumseh takes clean-up of contamination seriously

By Robert Golub  
*News Graphic Staff*

**Grafton** — Even Tecumseh Products Co. doesn't know for sure what caused groundwater under their property to become contaminated, but company officials say a thorough examination has revealed no danger to area residents.

Tecumseh discovered underground contamination while excavating old storage tanks. Tank removal began in 1988 and was completed in 1992. The underground tanks had been used to store gas, kerosene and other liquids.

When Tecumseh realized that the groundwater beneath their facility at 900 North St. had been compromised, they decided to test local groundwater. They feared that impurities might have migrated from beneath their facility to nearby drinking water.

Tecumseh is now close to completing

tastic job," Hoven said.

A Department of Natural Resources official agreed, saying that Tecumseh is a model corporate citizen. The company has been pro-active, going to great expense to look for potential problems.

In recent months, Tecumseh dug two testing wells at North and 13th streets and another at Sunset Court. The company is almost done with its testing.

"We believe that to conclude this investigation, we may need to install one—maybe two—more wells," Eberhardt said. The final testing will be done to the southeast of the plant.

Upon completion of the testing process, the company intends to cooperate with the DNR to consider remedial options. That is, Tecumseh may attempt to clean up the water beneath its plant.

Contamination may have been caused by solvents that were used as

## Special delivery

Valentines from pupils in St. Joseph School's four-year-old kindergarten received extra attention Tuesday, when the class visited the Grafton Post Office. After sending their greetings, the youngsters toured the building to see how mail is processed. Jenna Ostrowski (center) received some support from classmates Steven Klein (top) and Mary Kalies, as she stretched to mail a special card. Photo by Mark Justesen

ny reports that both private and public wells are safe.

"All the drinking waters were within state standards," company spokesman Dave Eberhardt said. "We feel very comfortable."

State Rep. Tim Hoven, who represents Grafton, said that the company has gone out of its way to keep him informed. "I think they're doing a fan-

would later be considered contaminants. The assembly work is no longer done in Grafton.

The village water utility shut down its North Street well across the street from the company in 1982.

Tecumseh officials are trying to reassure local residents that it takes environmental issues seriously. "Our concern is for the community," Eberhardt said.