



Environment Health & Safety
INTERNATIONAL PLACE
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Memphis, TN 38197
(901) 419-3845

May 16, 2018

U.S. Environmental Protection Agency, Region V
Superfund Remedial Response, Section VI (SR-6J)
77 West Jackson Boulevard
Chicago, Illinois 60604
Attn.: Ms. Jenny Davison
Remedial Project Manager

Wisconsin Department of Natural
Resources - RR/5
1300 W. Clairemont Avenue
Eau Claire, Wisconsin 54702
Attn.: Ms. Mae Willkom
Remedial Project Manager

RE: Biennial Institutional Controls Report (April 2016 – March 2018)
Tomah Municipal Sanitary Landfill Superfund Site
Tomah, Wisconsin

Dear Ms. Davison and Ms. Willkom:

Please find attached the following document, prepared by GHD Services Inc. (GHD), on behalf of International Paper and the City of Tomah:

- Biennial Institutional Controls Report (May 16, 2018)

The attached Biennial Institutional Controls (IC) Report was prepared pursuant to the Long-Term Stewardship Plan submitted as Table 1 of the Biennial IC Report submitted to the United States Environmental Protection Agency (USEPA) and Wisconsin Department of Natural Resources (WDNR) on May 11, 2016.

Please do not hesitate to contact me if you need any additional information or have any questions or comments.

Very truly yours,

INTERNATIONAL PAPER COMPANY

A handwritten signature in blue ink, appearing to read "P. Slowiak", written over a light blue circular stamp.

Philip J. Slowiak, Sr., CSP
Senior Project Manager

c.c.: Roger Gorius; City of Tomah (w/ enc.)
Penny Precour; City of Tomah (w/o enc.)
Kirk Arity; City of Tomah (w/o enc.)
Ryan Aamot; GHD (w/o enc.)



May 16, 2018

Reference No. 012865

Mr. Philip Slowiak, Sr., CSP
International Paper Company
6400 Poplar Avenue
Memphis, Tennessee 38197

Mr. Roger Gorius
City of Tomah
819 Superior Avenue
Tomah, Wisconsin 54660

Dear Sirs:

**Re: Biennial Institutional Controls Report
Tomah Municipal Sanitary Landfill Superfund Site
Tomah, Wisconsin
Civil Action No. 01 C 693 C**

This letter provides a Biennial Institutional Controls (IC) Report for the Tomah Municipal Sanitary Landfill (TMSL) Superfund Site (Site) prepared pursuant to the Revised Long-Term Stewardship Plan submitted as Table 2 of the Remedial Action Report (RAR) dated September 11, 2015 and Table 1 of this report. The RAR summarized and documented changes to the institutional controls (ICs) required by the 1997 Operable Unit 1 (OU1) Record of Decision (ROD) and 2003 Operable Unit 2 (OU2) ROD for the TMSL Site, as recommended within the USEPA Explanation of Significant Differences (ESD) issued on July 1, 2015. The RAR was intended to supplement, and not replace, those components of the remedy that are already in place.

This Biennial IC Report provides a certification to confirm that institutional controls in place since the last IC Report was issued in May 2016, as well as the additional/modified ICs implemented upon the September 2015 USEPA and WDNR approval of the RAR (included as Attachment A), have remained effective.

1. Background

The former Tomah Municipal Sanitary Landfill (TMSL) consists of an 18-acre unlined landfill situated on the southern portion of a 40 acres property in the SW $\frac{1}{4}$ of the NE $\frac{1}{4}$ of Section 32, Township 18 North, Range 1 West, Monroe County, Wisconsin, owned by the City of Tomah. The site is bounded on the north by wetland and Deer Creek, and on the east by Noth Avenue, wetland and residences, and on the west by agricultural land.

The City of Tomah operated the TMSL as a disposal site from 1959 to 1979, disposing of municipal and industrial wastes in shallow (3 to 8 feet) unlined trenches, which were excavated in the sandy subsoils over the southern half of the site and covered with native soils. In August 1975, the Wisconsin Department of Natural Resources (WDNR) ordered the City to close the site because of possible degradation of groundwater quality. The City closed the site in 1979.

Following numerous evaluations of the site, USEPA added the TMSL to the National Priorities List in 1989. Remedial actions were selected for the site, described in two consent decrees, Operable Unit 1 (OU1) and Operable Unit 2 (OU2). OU1 provided for, among other things, the capping of



the landfill and an expansion of the gas collection system. OU2 provides for, among other things, Monitored Natural Attenuation (MNA) and the implementation of Institutional Controls. These Controls, as supplemented by the additional/modified ICs implemented upon the USEPA and WDNR approval of the 2015 RAR, are now in effect at and around the site and are essential to the continued success of the overall remedial efforts. This report evaluates those Controls. Table 2 provides a property-by-property summary of all existing and proposed ICs. The updates made since the 2016 IC Report are highlighted in red text.

2. Revised Long-Term Stewardship Plan - Institutional Control Monitoring Results

The Revised Long-Term Stewardship Plan (Table 1) provides a mechanism for confirming that the existing governmental and proprietary controls are in place and remain effective.

Government controls include the following (see Attachment B)

1. State prohibition of any potable or non-potable well or reservoir within 1200 feet of a landfill
2. State restrictions on the use of a capped landfill
3. City/State restrictions against private wells

The frequency and method for monitoring these government controls are provided in the Revised Long-Term Stewardship Plan. Figures 1 through 8 of the May 2016 IC Report, along with Figure 9, have been updated with the results of these monitoring efforts (see attached). Results of these monitoring efforts are discussed in the following sections in the order they are presented in the Revised Long-Term Stewardship Plan.

2.1 Item 1 – Landfill Setback (LSBK)

Every two years, check for any new building and well construction within the setback zone.

The State of Wisconsin, through Wisconsin Administrative Code Chapters NR 812 and NR 504, set forth the guidelines for the use of wells and landfill caps, respectively. In short, wells are specifically prohibited within twelve-hundred (1,200) feet from landfill sites (see Wisconsin Administrative Code Chapter NR 812.08 Table A.). For closed sites such as the TMSL, this distance is from the Nearest Fill Area, if known, otherwise to the property line. For the TMSL cap, Wisconsin Administrative Code Chapter NR 504.07(9) prohibits the use of a now-covered landfill site for agricultural use, the establishment or construction of any buildings, or excavation of the final cover. Figure 2 identifies the 1,200-foot setback distance from the TMSL.

During March 2018, the WDNR Drinking and Groundwater website was checked for any new wells installed in Tomah and La Grange (Monroe County only) from April 2016 through March 2018. This query provided 21 construction forms with unique well numbers and physical addresses. As shown on Figure 3, none of the 21 wells constructed in Tomah or La Grange between April 2016 and March 2018 are located



within the 1200-foot setback zone. Twenty of the twenty-one wells and are located more than two miles from the landfill.

2.2 Item 2 - Landfill Cap (LCAP)

Every 2 years, inspect the landfill cap to check for unauthorized uses.

The State of Wisconsin, through Wisconsin Administrative Code Chapters NR 504.07(9), prohibits agricultural use, establishment or development of buildings, and excavation of final cover for solid waste disposal landfills which are no longer in operation.

The landfill cap is inspected on a monthly basis during routine gas monitoring events, and semi-annually during routine groundwater monitoring events. No evidence of unauthorized use has been identified during the April 2016 - March 2018 monitoring period.

2.3 Item 3a - Municipal Water Connection Within City Limits (MW (CL))

Every 2 years, confirm connections to municipal water within City Limits.

The City of Tomah has specifically restricted the use of private wells. City Ordinance Section 46-529 required that all private wells in Tomah be filled by January 1, 1989, unless the owners obtained a permit. Section 46-530 sets forth the requirements a land owner would have to meet in order to obtain a permit. This section is discretionary, and required that the well meet the requirements of Wisconsin Administrative Code Chapter NR 812, and a well constructor's report is on file with the WDNR, or certification of the acceptability of the well has been granted by the WDNR private water supply section. The proposed well would also have to be necessary, considering the public water supply system that Tomah has made mandatory (City Ordinance Sec. 46-50.) City Ordinance Section 46-101 and Wisconsin Administrative Code Chapter NR 811.06 -.07 also include regulations that prohibit cross-connections between private well installations and municipal water systems. Figure 4 identifies the City corporate limits in the area of the TMSL.

During March 2018, the City of Tomah confirmed that all residences within the City corporate limits in the area of the TMSL that had previously been connected to the municipal water system are currently connected. The City of Tomah reported that eight properties within the City corporate limits (outside the TMSL plume boundary) that were previously undeveloped (Properties 58 and 62-68) are currently under construction and are in the process of being connected to the municipal water system. An additional ten new connections were made within the City corporate limits in this area in 2017.

Table 2 (Groups 3A and 3B) and Figure 4 reflect the current status of development and related water connections for each property within the City corporate limits in the area of the TMSL.



2.4 Item 3b - Well Abandonment (Within City Limits)

A one-time confirmation was conducted during 2009-2012 to evaluate abandonment status of potential former private wells

In a letter dated September 14, 2009, USEPA and WDNR requested that a well inventory be conducted within a defined focus area. This focus area is shown on Figure 4. A well inventory was completed by the City of Tomah in 2009 and 2010. Further information regarding potential former private wells within the City limits was obtained during 2011 and 2012. The final results of the well inventory (within City limits) and subsequent investigations are noted below and in Table 2 – Group 3A/3B.

As of March 2018, all properties located within the City limits (in the focus area defined by USEPA/WDNR) were either undeveloped (no existing wells) or were currently connected to the municipal water system for their drinking water source (see Table 2 - Group 3A/3B), and any related former private wells had been abandoned.

2.5 Item 3c - Well Construction Permits (Within City Limits)

Every 2 years check for any new private domestic wells within the area of concern.

As previously discussed, and shown on Figure 3, none of the 21 wells constructed in Tomah and La Grange between April 2016 and March 2018 are located within the focus area defined by the USEPA and WDNR.

2.6 Item 4a - Municipal Water Connection Outside City Limits (MW(PA))

Every 2 years confirm connections to municipal water outside City Limits (Private agreements).

As an extension of the remedial activities for the TMSL, the City and International Paper (IP) connected nearby residential homes to municipal water that are identified on Figure 5. Written agreements between the City of Tomah and these residents were provided as Attachment C of the 2012 Biennial IC Report.

In March 2018, the City of Tomah confirmed that all residences outside the City corporate limits (in the focus area defined by the USEPA and WDNR) previously connected to the municipal water system (under private agreement with the City of Tomah and IP (RPs)) are currently connected to the municipal water system. Property numbers are shown on Figure 5, with further detail provided for each property on Table 2.

As shown on Figure 5, there are only six potential residential well receptors in the vicinity beyond the delineated TMSL plume. These five locations are developed properties located beyond the current boundary of the TMSL plume and outside the City Limit, and therefore are not subject to the City ordinance that stipulates mandatory connection to municipal water and abandonment of private wells (see Table 2 - Group 2B and Figure 5).

Four of the five landowners associated with these wells (Friske, Johnson, J. Pleuss, T. Pleuss, and Pleuss Rental) declined offers to connect to the municipal water system, while one (Heffel) did not respond to the offer. Two of the six potential receptor locations (Friske and Heffel) are sampled routinely. The remaining



four locations (Johnson, J. Pleuss, T. Pleuss, and Pleuss Rental) are no longer included in the sampling plan.

2.7 Item 4b - Well Abandonment Outside City Limits

A one-time confirmation was conducted during 2009 – 2012 to evaluate abandonment status of potential former private wells.

As stated previously, a well inventory was completed by the City of Tomah in 2009 and 2010. Further information regarding potential former private wells was obtained during 2011 and 2012. As of March 2012, results of the well inventory (outside City limits, but within the focus area defined by USEPA and WDNR) and subsequent investigations are noted below and in Table 2.

2.7.1 Flatter Avenue

All private wells on properties located along Flatter Avenue that were connected to municipal water in 2003 (under private agreements with the RPs) have been abandoned. WDNR well sealing records for these former private wells were provided as Attachment B of the 2012 Biennial IC Report.

Table 2 - Group 2B reflects the current well status for the Flatter Avenue properties.

2.7.2 Sunnyvale Subdivision

All private wells on properties located within the Sunnyvale Subdivision that were connected to municipal water in 1993 (under private agreements with the RPs) have been abandoned. WDNR well sealing records for these former private wells were provided as Attachment B of the 2012 Biennial IC Report.

Table 2 - Group 4 reflects the current well status for the Sunnyvale Subdivision properties.

2.7.3 Other Well Abandonment (Outside City Limits)

- IP and the City also requested to abandon the former Williams (Hanson) (Property 4) groundwater monitoring well in May 2010. This request was approved by the USEPA and WDNR on July 19, 2010. The Williams (Hanson) property was connected to municipal water in 1999 (under private agreement with the RPs), but the former private well was not abandoned and had been used for long-term groundwater monitoring associated with the TMSL Site. On April 16, 2012, after numerous attempts to gain access to the Hanson property, the property owner refused to allow the City to abandon their former private well. This former private well will continue to be sampled every 5 years (i.e., 2013, 2018, etc.) in accordance with the approved groundwater monitoring program (see Table 3).
- On October 16, 2011, the private wells at the Thomson (Property 17) and Week (Property 18) properties were abandoned following the properties' connections to municipal water. WDNR sealing records for these private wells were included in Attachment B of the 2012 Biennial IC Report.



2.8 Item 4c - Well Construction Permits Outside City Limits

Every 2 years check for any new private domestic wells within the area of concern.

As previously discussed, and as shown on Figure 3, none of the 21 wells constructed in Tomah and La Grange between April 2016 and March 2018 are located within the focus area defined by USEPA and WDNR.

As of March 2018, all properties located outside the City Limit (in the focus area defined by the USEPA and WDNR) are either undeveloped (no existing wells) or continue to use an existing private well as a drinking water source (see Table 2 - Group 2A/2B).

2.9 Item 5a – Restrictive Covenants/Environmental Protective Easements (RC/EPE)

Every 2 years contact the County Register to confirm that Restrictive Covenants are recorded.

During April 2018, the City of Tomah contacted the Monroe County Register and obtained copies of the following recorded proprietary controls for review:

- Commitment for Title Insurance
- Updated Endorsement

Attachment C provides the Commitment for Title Insurance for the TMSL site. The updated endorsement extends the effective date of the document to April 26, 2018. The Title Commitment documents did not identify any claims, encumbrances, or liens.

Environmental Protection Easements and Declaration of Restrictive Covenants (EPE/RC) and amendments thereto have been filed with the Register of Deeds for Monroe County for the TMSL property and two properties overlying the TMSL plume, as detailed in Table 2.

The EPE/RCs grant the WDNR, the International Paper Company, and the United States (as a third-party beneficiary), the perpetual right to enforce the restrictions contained therein, including right of access, private well restrictions, a municipal water requirement for any future owners, and a general prohibition on any activities that would frustrate the goals of, or adversely affect, the remedial actions on the site in any way. These restrictions and covenants run with the land. Copies of the original EPE/RCs were provided in the 2012 Biennial IC Report. Copies of the amended EPE/RCs were provided in the 2014 Biennial IC Report as Attachment C.

2.10 Item 5b – Restrictive Covenants/Environmental Protective Easements (RC/EPE)

Every 2 years, visually inspect properties for unauthorized well installations/developments.

Properties are visually inspected for unauthorized well installations and developments during routine landfill gas, groundwater, residential well, and surface water monitoring events. No evidence of unauthorized use has been identified during the April 2016 - March 2018 monitoring period.



2.11 Item 5c - Restrictive Covenants/Environmental Protective Easements (RC/EPE)

Every 2 years check for any new private domestic wells within the area of concern.

As previously discussed, and as shown on Figure 3, none of the 21 wells constructed in Tomah and La Grange between April 2016 and March 2018 are located within the focus area defined by USEPA and WDNR.

2.12 Item 6 – Land Use Restrictions

Every 2 years contact City Clerk/Monroe County Zoning Administration.

Changes and amendments to municipal zoning district designations are governed by Tomah Ordinance 52-256. During April 2018, GHD contacted the City Clerk/Monroe County Zoning Administration to check for zoning change petitions associated with the TMSL and affected properties. No petitions were found.

The TMSL consists of one parcel (located in the City of Tomah) and is zoned C, Commercial. A copy of the City of Tomah Zoning map is included in Attachment D.

The properties immediately adjacent to the TMSL are located in La Grange Township and are subject to Monroe County zoning. Immediately south of the landfill, the residential areas on Flute Avenue and Flame Avenue are zoned R-2 – Suburban Residential. The properties immediately north, east, and west of the TMSL are zoned GA – General Agriculture, including those properties overlying the TMSL plume. A copy of the Monroe County zoning map is included in Attachment D.

2.13 Item 7 – Governmental Controls

Every 2 years review City of Tomah ordinances for changes

As discussed in Section 2.3, the City of Tomah has specifically restricted the use of private wells through municipal ordinances. During March 2018, pertinent City of Tomah ordinances (cited in the Biennial IC Report) were reviewed for changes. There were no changes identified. (https://www.municode.com/library/wi/tomah/codes/code_of_ordinances). Copies of the applicable City of Tomah Ordinances are provided in Attachment B.

2.14 Item 8 – Governmental Controls/Information Devices

Every 2 years review and improve maps, review WI statutes and Administrative Codes.

The State of Wisconsin, through WAC Chapter NR 292.12 has placed continuing obligations (requiring compliance with a state rule and other conditions) on all properties overlying the groundwater plume of contamination at the TMSL. The 292.12 statute allows for limitations to be imposed in accordance with rules promulgated by the department, including WAC NR 812. These Rules, directly or indirectly, ensure that if there is groundwater contamination above state enforcement standards and the property owner plans to construct or reconstruct a water supply well, the owner must obtain prior WDNR approval to ensure that well construction is designed to protect the water supply from contamination. The rules are



enforceable by WDNR under Wisconsin Statute 292.12 and have been documented in the RAR approval letter from the WDNR. A copy of the RAR approval letter is included in Attachment A.

In accordance with Wisconsin Statute 292.12(2)(c), the approved continuing obligations were listed in an on-line, inter-linked system maintained by the WDNR Bureau of Remediation and Redevelopment. The online system, known as The Wisconsin Remediation and Redevelopment Database (WRRD), formerly called the Contaminated Lands Environmental Action Network (CLEAN), provides information on contaminated land activities in Wisconsin to assist with the investigation, clean-up, and ultimate re-use of contaminated parcels, and is located at: <https://dnr.wi.gov/topic/Brownfields/wrrd.html>.

WRRD includes the Bureau for Remediation and Redevelopment Tracking System (BRRTS) and the Remediation and Redevelopment (RR) Sites Map. BRRTS is an on-line database that provides information on contaminated properties and other activities in Wisconsin. The RR Sites Map is a web-based mapping system that allows a user to view different layers of contamination data using a Geographic Information System (GIS) tool. In addition to information on the cleanup of soil and groundwater, the WRRD system also contains, but is not limited to, a public registry of sites where continuing obligations have been put in place.

Additional IC actions, in the form of Wisconsin continuing obligations regulations, were necessary in order to ensure long term protectiveness of the TMSL site. The WRRD on-line system is considered an Information Device for continuing obligations based on Government Controls. The TMSL and properties overlying the plume of contamination were listed on the BRRTS database and RR Sites Map to provide public notice of residual contamination and of continuing obligations. The WRRD on-line system, BRRTS database, and the RR Sites Map were reviewed in April 2018 and no improvements are required.

Continuing obligations will remain on the properties so that any new owner(s) are legally responsible for complying with them after a property transfer. Continuing obligations are enforceable by the WDNR under Wisconsin Statute 292.12.

In letters dated August 25, 2015, the affected property owners (detailed in Section 2.1.3 and shown on Figure 3) were provided notification of the residual groundwater contamination and the continuing obligations for which they may become responsible. The delivery of these letters was completed on August 27th and 29th, 2015. Copies of these letters were included in the 2016 IC Report.

Continuing obligations for both the TMSL and the properties overlying the plume of contamination include:

- Obtaining prior WDNR approval prior to constructing a new well or reconstructing an existing well

Information regarding TMSL from the WRRD system was included in Appendix H of the RAR. Also posted on WRRD is an "Ongoing Cleanups with Continuing Obligations Sheet" summarizing continuing obligations regarding environmental conditions on the property. Additional detailed information was placed on the WRRD system upon WDNR approval of the RAR.

The informational maps submitted in the RAR illustrated the individual parcels and general areas potentially affected by the TMSL and protected by ICs. These figures were placed on the USEPA website for the TMSL.



The WDNR regulates the design and operation of municipal water systems through WAC Chapters NR 810 and NR 811. Section NR 810.16 prevents unused, unsafe and noncomplying wells from acting as vertical conduits for aquifer contamination or as sources of unsafe water that could enter the public water system through cross connections. Section NR 811.06 prohibits unprotected cross-connections and NR 811.07 prohibits interconnections between public water supply systems and other sources of water unless permitted by the WDNR.

The WAC applies throughout the state and therefore applies to the entire area near the TMSL. Attachment B contains copies of pertinent state regulations. Relevant WI statutes and Administrative Codes were discussed in Section 2.0.

3. Additional Ongoing Institutional Control Activities

3.1 Second Five Year Review

As part of the USEPA Second Five-Year Review Report dated January 11, 2010, the RPs were asked to provide additional details and/or evaluations on several IC items. Information for these IC items was provided within the May 2010, May 2012, and May 2014 IC Reports. Relevant follow-up information for some of the IC items is provided in the following section. Attachment F provides an electronic copy of the figures and also provides GIS coordinates that include updated ESRI polygon shape files.

3.1.1 USEPA Item #4 - Evaluate whether existing controls cover the entire area that needs to be restricted

As summarized in the 2012 Biennial IC Report, the City of Tomah attempted to secure additional EPEs from the following title holders of properties overlying the TMSL plume not covered by RCs:

- Ruth Williams (Hanson) (current Properties 3 and 4)
- Tom Pleuss (Properties 6 and 11)
- John Pleuss (Properties 7 and 12)
- Patrick Leverty (formerly Jessica Kortbein) (Properties 5 and 31)

These property owners would not agree to execute the draft RCs in 2006, and rejected the October 2010 offers for connection to municipal water and/or the abandonment of private wells. In 2012, Ms. Kemmerling (owner of Properties 3 and 31) signed the RC. The signed RC was included in the 2012 IC Report. In a letter dated March 17, 2010, the USEPA required that IP and the City provide biennial notification/verification letters to provide:

- A verification that any wells on the property are not being used for drinking water purposes
- A reminder that there is a potential to be impacted by the groundwater plume
- A reminder of obligations to notify any prospective purchasers of the plume



To date, IP and the City have met these notification/verification requirements. 2010, 2012, 2014, and 2016 notification/verification letters were included as Attachments of the previous Biennial IC Reports. Letters issued on April 27, 2018 are included in Attachment E of this report.

3.2 Third Five Year Review

As part of the USEPA third Five-Year Review Report dated January 9, 2015, the RPs were asked to develop and implement COs and place the impacted properties on the Wisconsin GIS Registry.

3.2.1 USEPA Item #1) Not all properties above the groundwater plume have the required ICs.

On July 1, 2015 the USEPA issued an Explanation of Significant Differences (ESD) to document a significant change to the types of institutional controls required by the 1997 OU1 ROD and 2003 OU2 ROD for the TMSL. A copy of the 2015 ESD was included as Appendix C of the RAR.

In letters dated August 25, 2015, the affected property owners were provided notification of the residual groundwater contamination and the continuing obligations for which they may become responsible. The delivery of these letters was completed on August 27th and 29th, 2015. Copies of the letters were provided in the 2016 IC Report. Figure 9 presents the properties with continuing obligations. The affected properties include:

- Scott D. Martin (020-01216-0000)
- Roger L. Williams (020-01215-0000)
- Ruth A. Hanson (Williams) (020-01215-0001)
- Scott Oberbeck (formerly Catherine Kemmerling) (020-01281-0000)
- Thomas R. & Patricia A. Pleuss (020-01209-0000)
- John D. & Mina L. Pleuss (020-01209-2000)

Full implementation of the additional/modified ICs required by the 2015 ESD was completed once approval of the Remedial Action Report was granted by the USEPA and WDNR. Approval was granted in a letter dated September 30, 2015. The approval letter is provided in Attachment A.

Specifically, the approval of the RAR allows for the use of continuing obligations to be imposed on properties overlying the plume of contamination in accordance with Statute 292.12 and rules promulgated by the department, including WAC NR 812. The CO's will: prohibit contaminated groundwater from being used as a drinking water source; and/or prohibit the installation of new wells without special approval from the appropriate government regulatory authority. The conditions imposed on these properties are listed on the BRRTS database and RR Sites Map to provide public notice of residual contamination and of continuing obligations.



4. Recommendations

The Institutional Controls are effective in providing long-term protectiveness, effectiveness, and integrity of the remedy. The Restrictive Covenants run with the land and are binding on any and all successors and all persons who acquire any interest in the property. Ongoing maintenance of the TMSL by the City of Tomah ensures that the ICs are preventing exposure and that the land remains unused.

The City of Tomah has no plans to sell the TMSL due to the ongoing remedial efforts. Any sale would require notice to the USEPA. Additionally, WDNR and the City of Tomah do not plan on making any of the ICs referenced in this document less strict in the foreseeable future. Therefore, all governmental controls now in effect, (i.e., the 1,200-foot landfill setback well restriction, the mandatory municipal water connection, and the prohibition of private wells) will continue to be effective indefinitely. Verification of these government controls will be completed on a regular basis, in accordance with the Revised Long-Term Stewardship Plan (Table 1), and as discussed previously in this report.

IP and the City have put forth a reasonable effort to secure the proposed additional ICs detailed in this report and summarized in Table 2 and on Figure 8. Because it is unlikely that some property owners will change their minds (i.e., T. Pleuss, J. Pleuss, Johnson, Friske, Heffel, Williams (Hanson), and undeveloped property owners), the City will try to secure these RCs/EPEs if and when the properties change hands.

In the interim, in addition to the ICs that are currently in-place to protect the integrity of the remedy and minimize potential exposure to contamination, the following continued actions/additional controls are proposed:

- Continued biennial notification/verification letters in an attempt to secure ICs (see Section 3.1).
- Continued monitoring of existing wells on developed properties within the focus area that have declined RCs/EPEs, water connections/well abandonments (see Section 2.6 and Table 3).

Should you have any questions on the above, please feel free to contact me.

Sincerely,

GHD

A handwritten signature in black ink, appearing to read 'Ryan Aamot', written over a white background.

Ryan Aamot

LP/sb/19

Encl.

LEGEND

- MONITORING WELL LOCATION
- ☒ STAFF GAUGE LOCATION
- ⊗ SURFACE WATER SAMPLING LOCATION
- RESIDENTIAL WELL LOCATION
- ◐ CONVERTED FORMER RESIDENTIAL WELL
- ⊗ FORMER RESIDENTIAL WELL LOCATION (ABANDONED OCTOBER 2011)
- ESTIMATED EXTENT OF VINYL CHLORIDE (>0.2 µg/L)
- ➔ DIRECTION OF GROUNDWATER FLOW
- RESTRICTIVE COVENANT ON PROPERTY

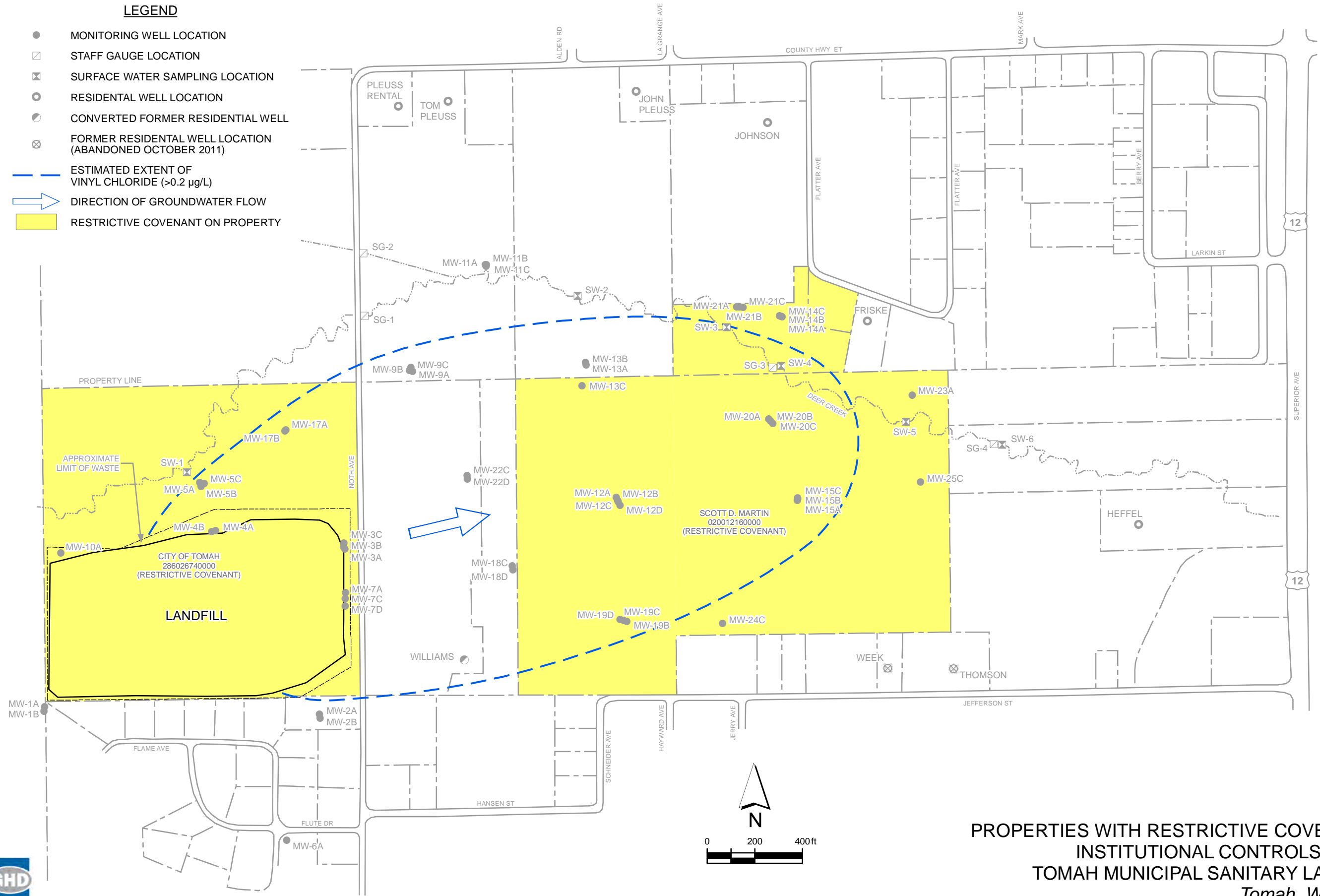


figure 1
PROPERTIES WITH RESTRICTIVE COVENANTS
INSTITUTIONAL CONTROLS STUDY
TOMAH MUNICIPAL SANITARY LANDFILL
Tomah, Wisconsin



LEGEND

- MONITORING WELL LOCATION
- ☒ STAFF GAUGE LOCATION
- ⊗ SURFACE WATER SAMPLING LOCATION
- RESIDENTIAL WELL LOCATION
- ◐ CONVERTED FORMER RESIDENTIAL WELL
- ⊗ FORMER RESIDENTIAL WELL LOCATION (ABANDONED OCTOBER 2011)
- ESTIMATED EXTENT OF VINYL CHLORIDE (>0.2 µg/L)
- ➔ DIRECTION OF GROUNDWATER FLOW
- 1200-FOOT SETBACK DISTANCE

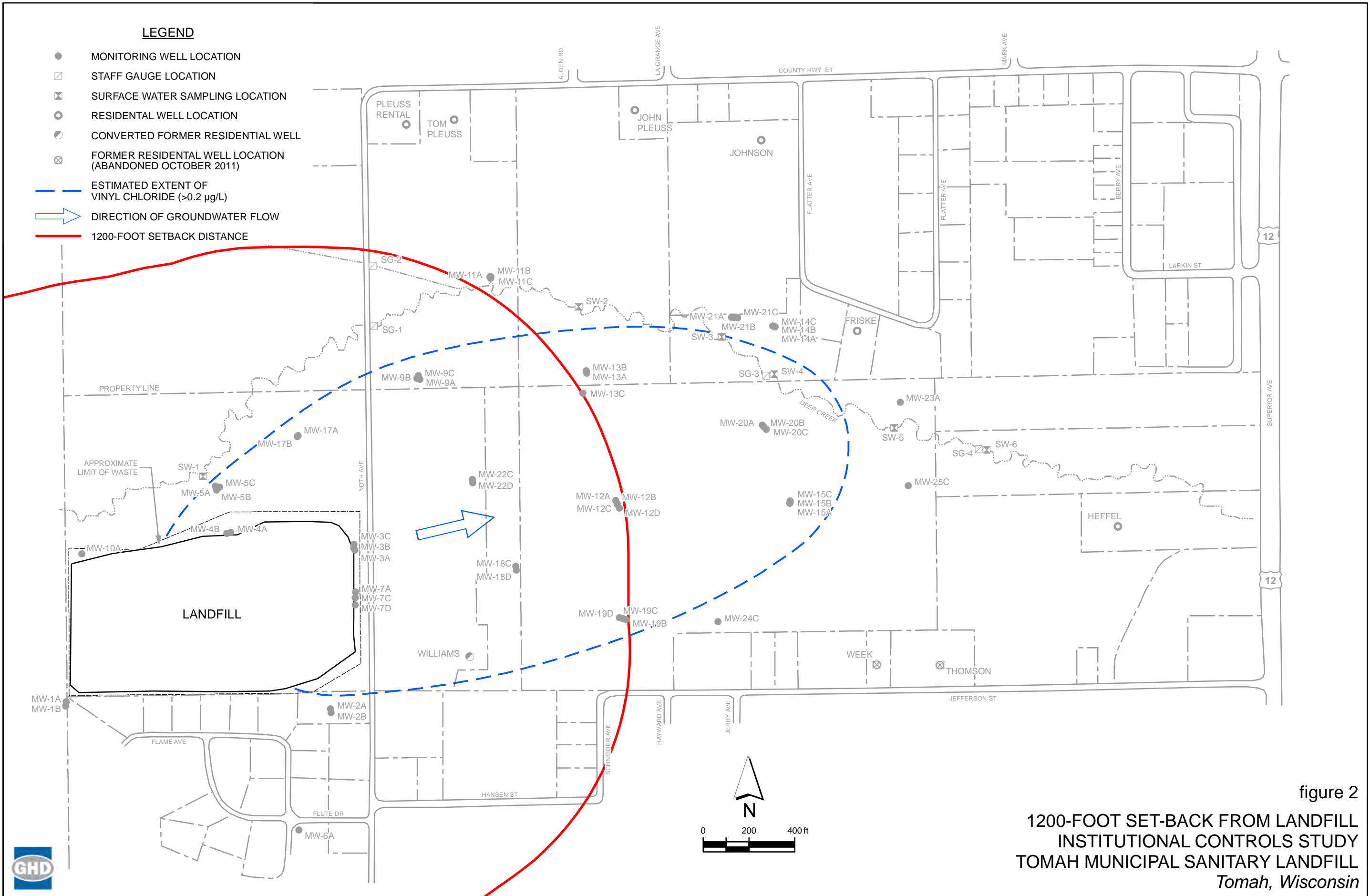
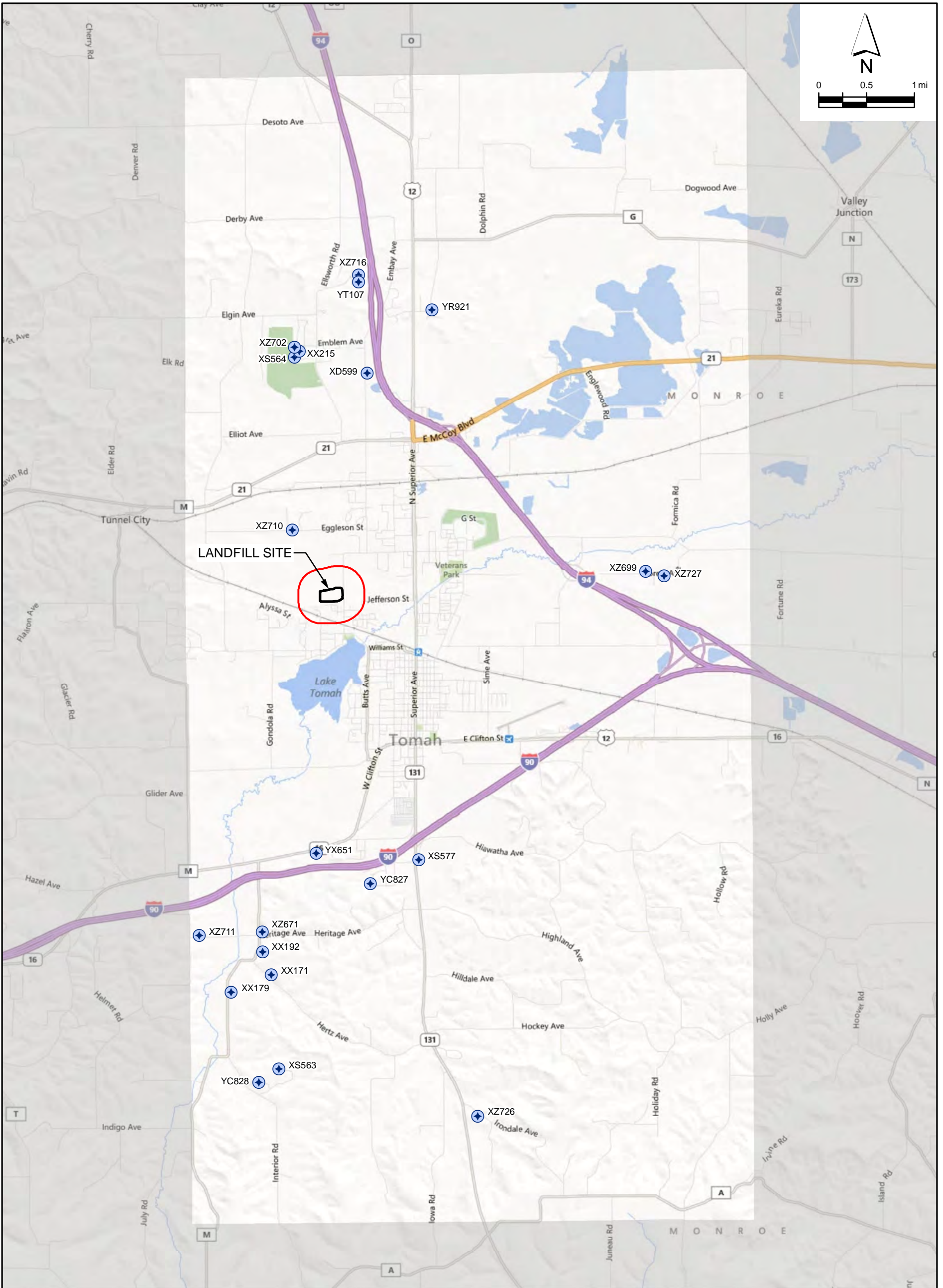


figure 2
 1200-FOOT SET-BACK FROM LANDFILL
 INSTITUTIONAL CONTROLS STUDY
 TOMAH MUNICIPAL SANITARY LANDFILL
 Tomah, Wisconsin





LEGEND




-  WELL CONSTRUCTED FROM APRIL 2016 TO MARCH 2018
- UN472 WISCONSIN UNIQUE WELL NUMBER
-  1200-FOOT SETBACK DISTANCE
-  AREAS OUTSIDE OF SEARCH PARAMETERS



figure 3
LOCATIONS OF WELLS CONSTRUCTED FROM APRIL 2016 THROUGH MARCH 2018
INSTITUTIONAL CONTROLS STUDY
TOMAH MUNICIPAL SANITARY LANDFILL
Tomah, Wisconsin

LEGEND

- MONITORING WELL LOCATION
- ☒ STAFF GAUGE LOCATION
- ⊗ SURFACE WATER SAMPLING LOCATION
- RESIDENTIAL WELL LOCATION
- ◐ CONVERTED FORMER RESIDENTIAL WELL
- ⊗ FORMER RESIDENTIAL WELL LOCATION (ABANDONED OCTOBER 2011)
- ESTIMATED EXTENT OF VINYL CHLORIDE (>0.2 µg/L)
- ➔ DIRECTION OF GROUNDWATER FLOW
- ▭ CITY CORPORATE LIMIT (MANDATORY CONNECTION TO CITY WATER)
- ▬ FOCUS AREA DEFINED BY USEPA/WDNR IN LETTER DATED 9/14/09
- 1 ○ PROPERTY REFERENCE # (SEE TABLE 2)
- DEVELOPED PARCEL

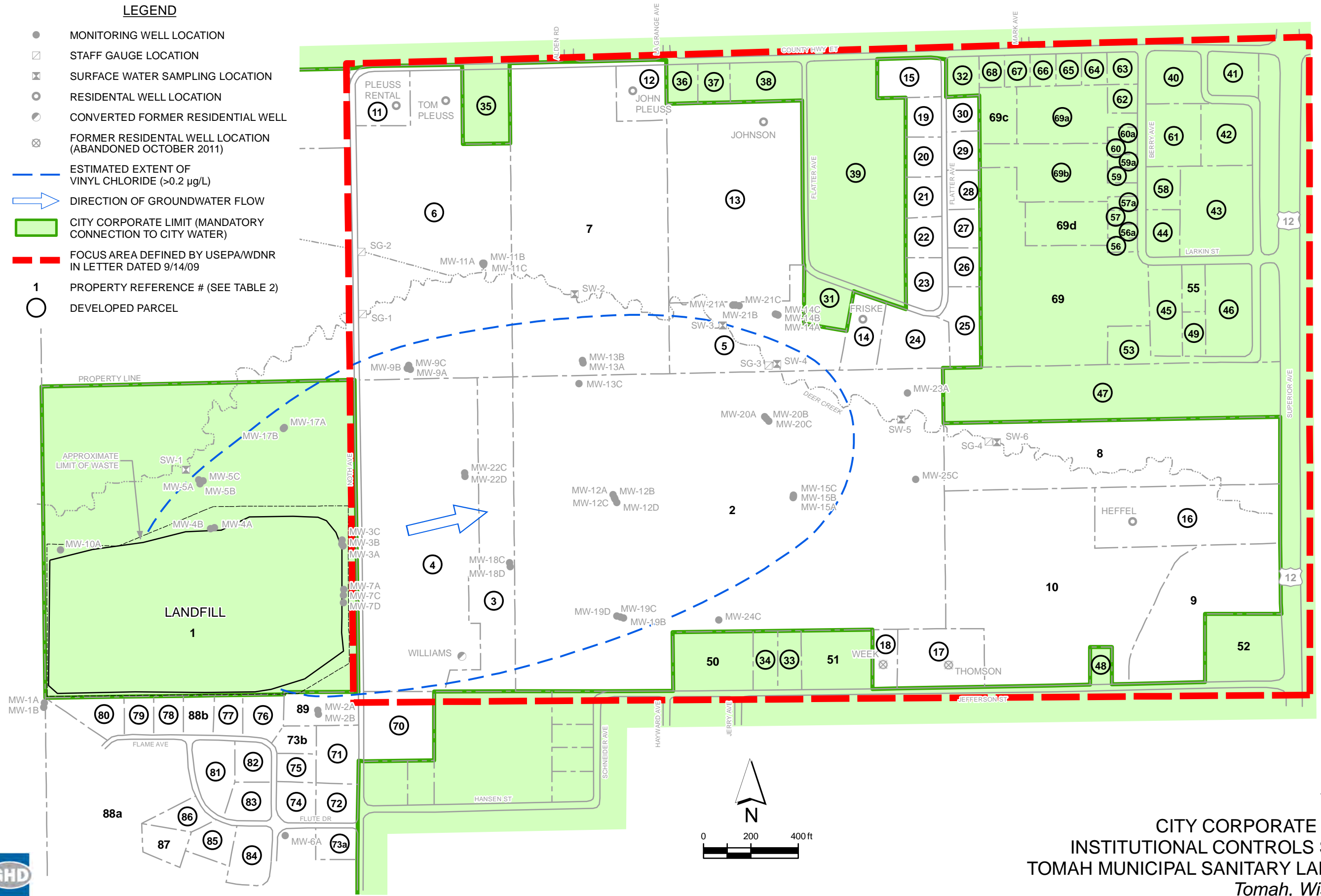


figure 4
 CITY CORPORATE LIMITS
 INSTITUTIONAL CONTROLS STUDY
 TOMAH MUNICIPAL SANITARY LANDFILL
 Tomah, Wisconsin



LEGEND

- MONITORING WELL LOCATION
- ☒ STAFF GAUGE LOCATION
- ⊗ SURFACE WATER SAMPLING LOCATION
- RESIDENTIAL WELL LOCATION
- CONVERTED FORMER RESIDENTIAL WELL
- ⊗ FORMER RESIDENTIAL WELL LOCATION (ABANDONED OCTOBER 2011)
- ESTIMATED EXTENT OF VINYL CHLORIDE (>0.2 µg/L)
- ➔ DIRECTION OF GROUNDWATER FLOW
- ▭ CITY CORPORATE LIMIT (MANDATORY CONNECTION TO CITY WATER)
- ▭ CONNECTED TO MUNICIPAL WATER (BY AGREEMENT WITH CITY OF TOMAH)
- ▭ FOCUS AREA DEFINED BY USEPA/WDNR IN LETTER DATED 9/14/09
- 1 ○ PROPERTY REFERENCE # (SEE TABLE 2)
- DEVELOPED PARCEL

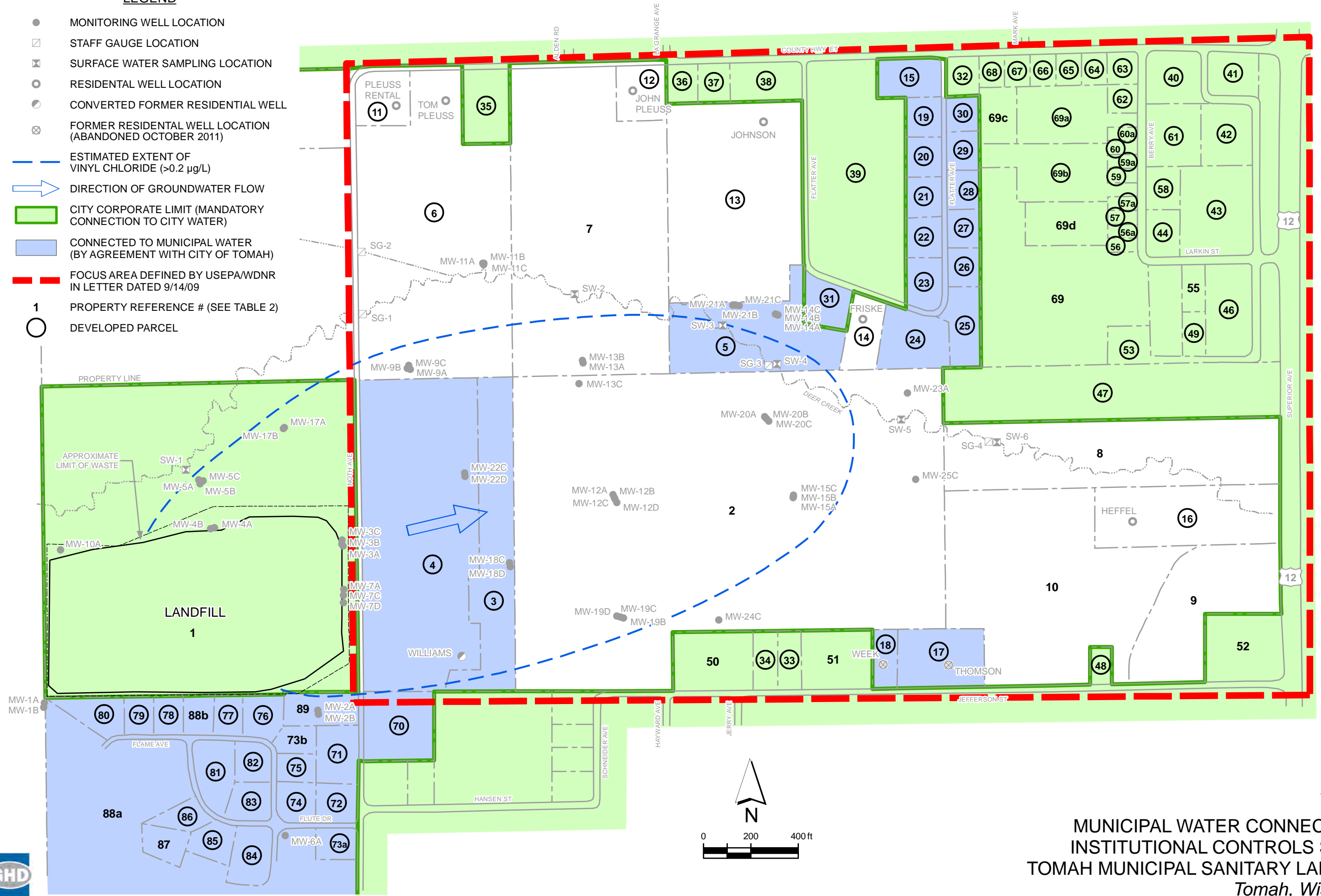


figure 5
MUNICIPAL WATER CONNECTIONS
INSTITUTIONAL CONTROLS STUDY
TOMAH MUNICIPAL SANITARY LANDFILL
Tomah, Wisconsin



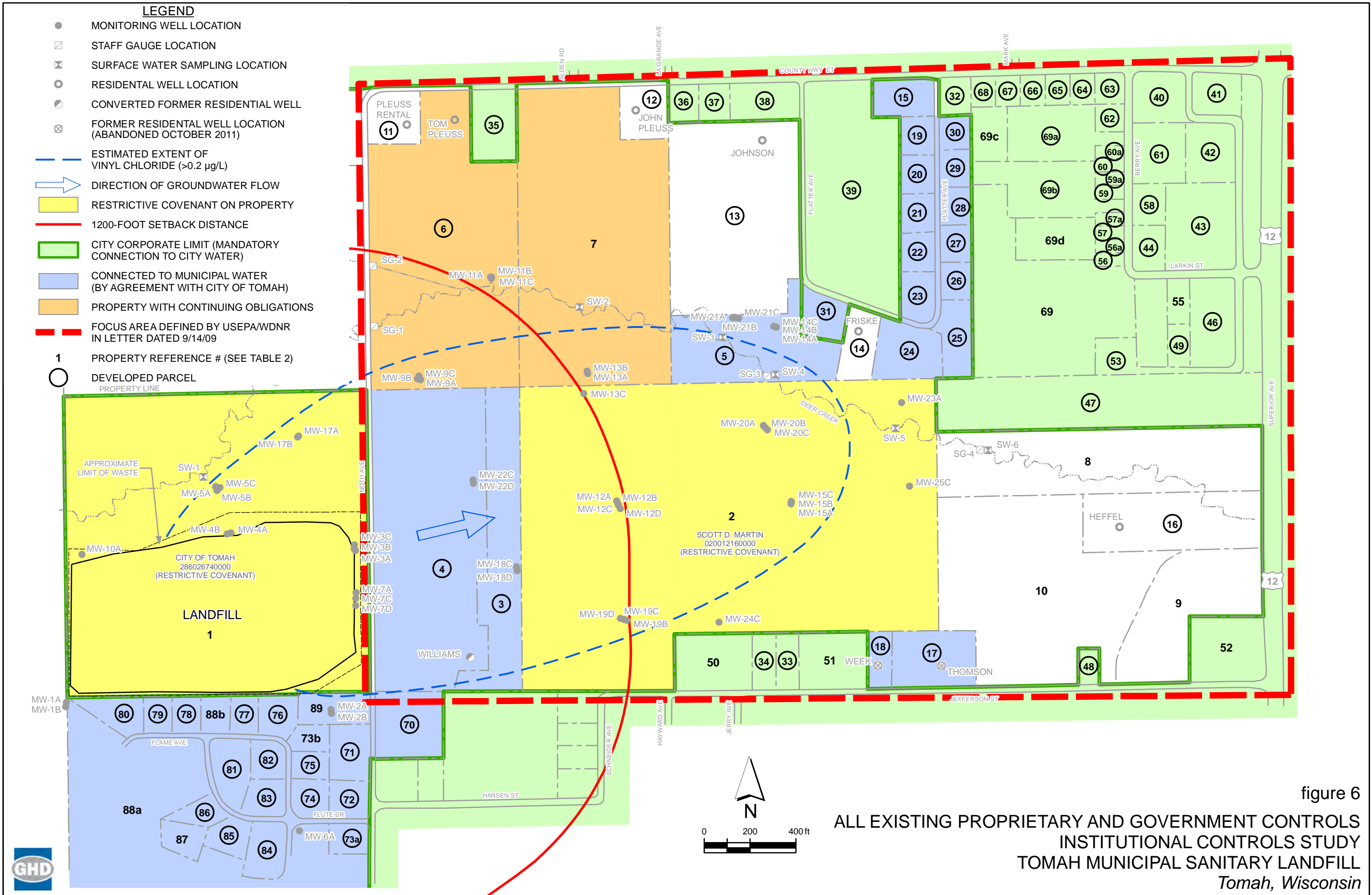


figure 6
 ALL EXISTING PROPRIETARY AND GOVERNMENT CONTROLS
 INSTITUTIONAL CONTROLS STUDY
 TOMAH MUNICIPAL SANITARY LANDFILL
 Tomah, Wisconsin

LEGEND

- MONITORING WELL LOCATION
- ☒ STAFF GAUGE LOCATION
- ⊗ SURFACE WATER SAMPLING LOCATION
- RESIDENTIAL WELL LOCATION
- ◐ CONVERTED FORMER RESIDENTIAL WELL
- ⊗ FORMER RESIDENTIAL WELL LOCATION (ABANDONED OCTOBER 2011)
- ESTIMATED EXTENT OF VINYL CHLORIDE (>0.2 µg/L)
- ➔ DIRECTION OF GROUNDWATER FLOW
- EXISTING CONTROLS IN PLACE

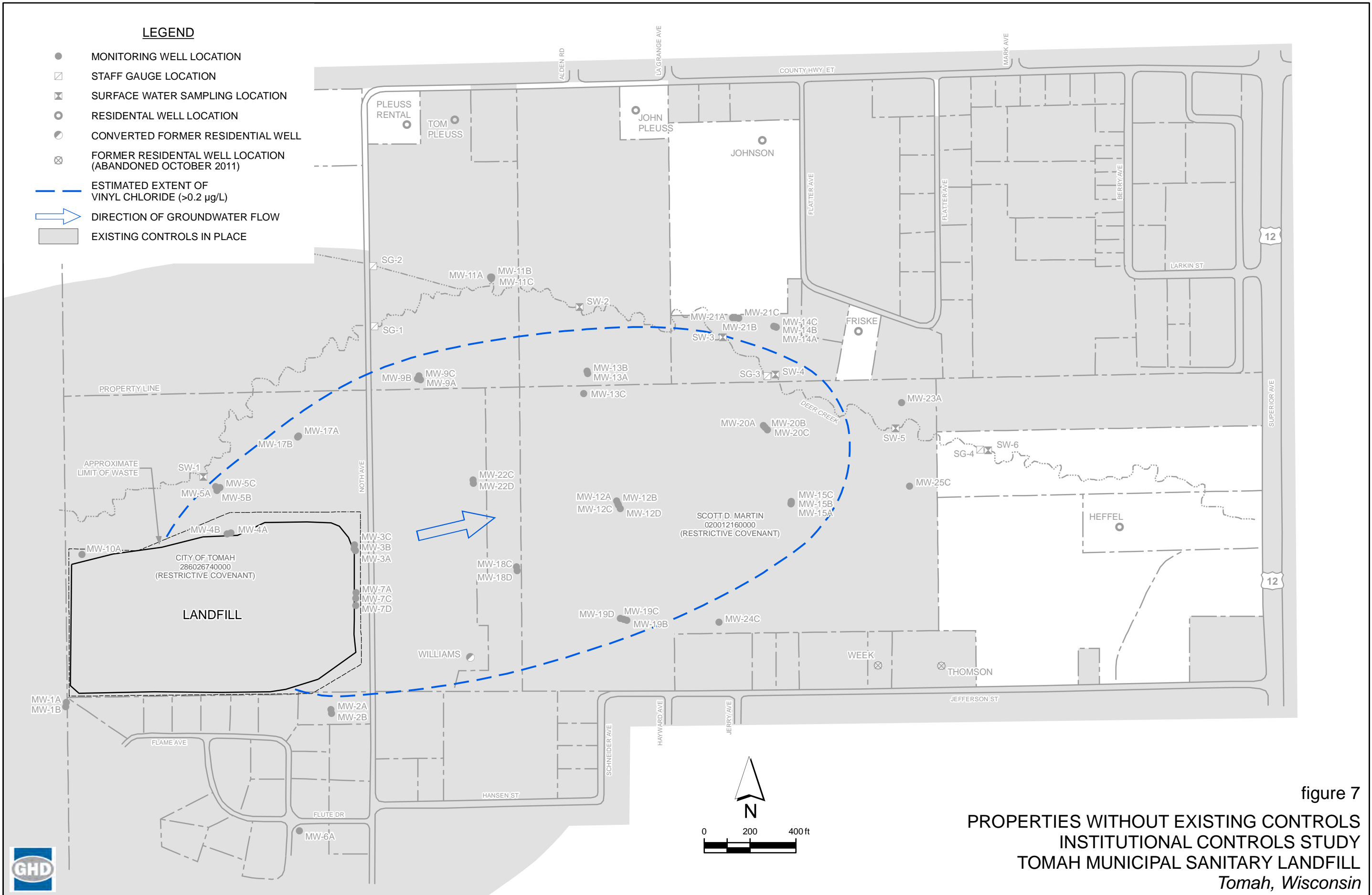


figure 7
PROPERTIES WITHOUT EXISTING CONTROLS
INSTITUTIONAL CONTROLS STUDY
TOMAH MUNICIPAL SANITARY LANDFILL
Tomah, Wisconsin

LEGEND

- MONITORING WELL LOCATION
- ☒ STAFF GAUGE LOCATION
- ⊗ SURFACE WATER SAMPLING LOCATION
- RESIDENTIAL WELL LOCATION
- ◐ CONVERTED FORMER RESIDENTIAL WELL
- ⊗ FORMER RESIDENTIAL WELL LOCATION (ABANDONED OCTOBER 2011)
- ESTIMATED EXTENT OF VINYL CHLORIDE (>0.2 µg/L)
- ➔ DIRECTION OF GROUNDWATER FLOW
- EXISTING CONTROLS IN PLACE
- PROPOSED CONNECTION TO MUNICIPAL WATER
- PROPOSED ENVIRONMENTAL EASEMENT
- FOCUS AREA DEFINED BY USEPA/WDNR IN LETTER DATED 9/14/09
- 4 PROPERTY REFERENCE # (SEE TABLE 2)
- DEVELOPED PARCEL

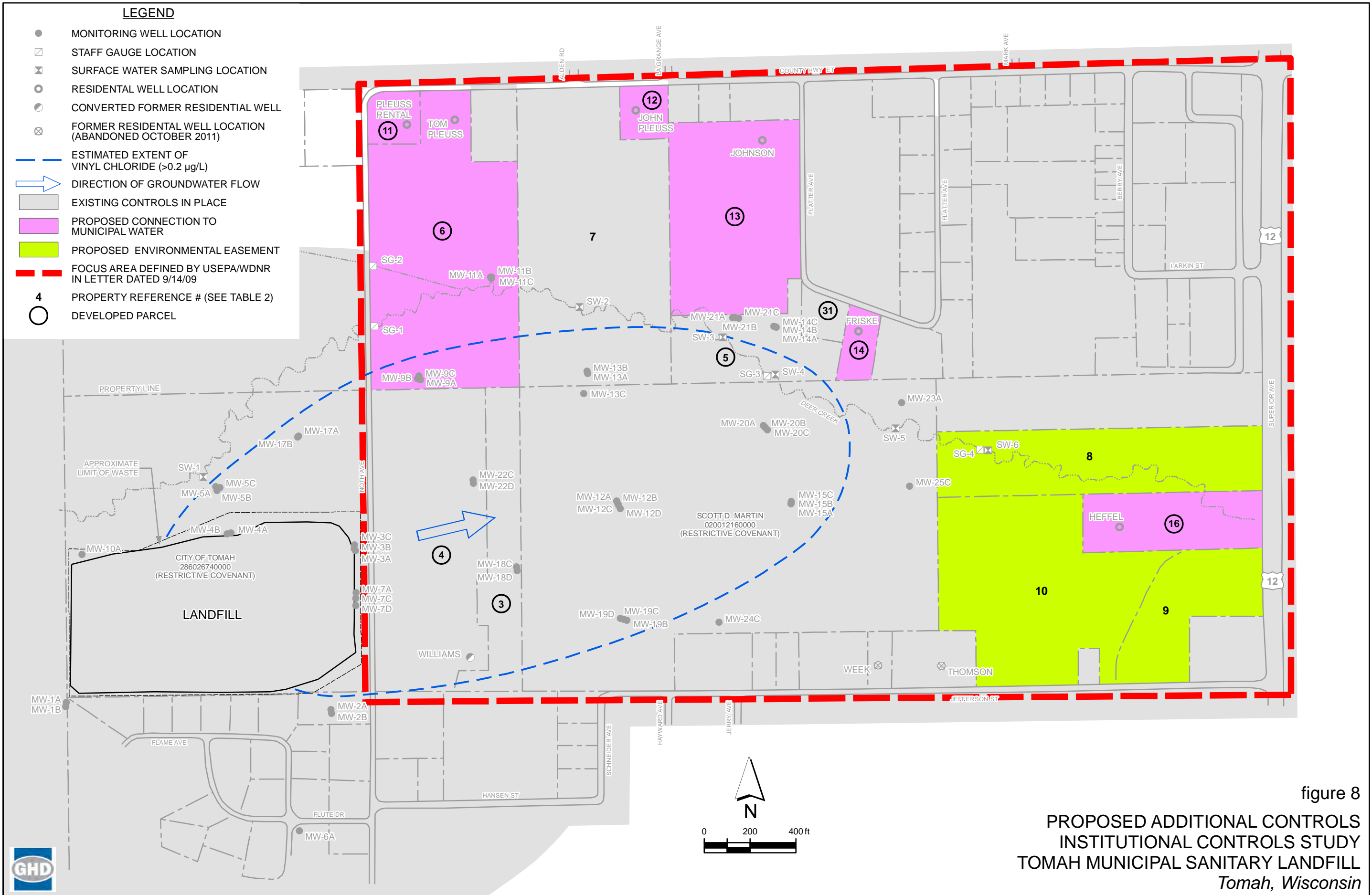


figure 8
PROPOSED ADDITIONAL CONTROLS
INSTITUTIONAL CONTROLS STUDY
TOMAH MUNICIPAL SANITARY LANDFILL
Tomah, Wisconsin

LEGEND

- MONITORING WELL LOCATION
- ☒ STAFF GAUGE LOCATION
- ⊗ SURFACE WATER SAMPLING LOCATION
- RESIDENTIAL WELL LOCATION
- ◐ CONVERTED FORMER RESIDENTIAL WELL
- ⊗ FORMER RESIDENTIAL WELL LOCATION (ABANDONED OCTOBER 2011)
- ESTIMATED EXTENT OF VINYL CHLORIDE (>0.2 µg/L)
- ➔ DIRECTION OF GROUNDWATER FLOW
- PROPERTY WITH CONTINUING OBLIGATIONS

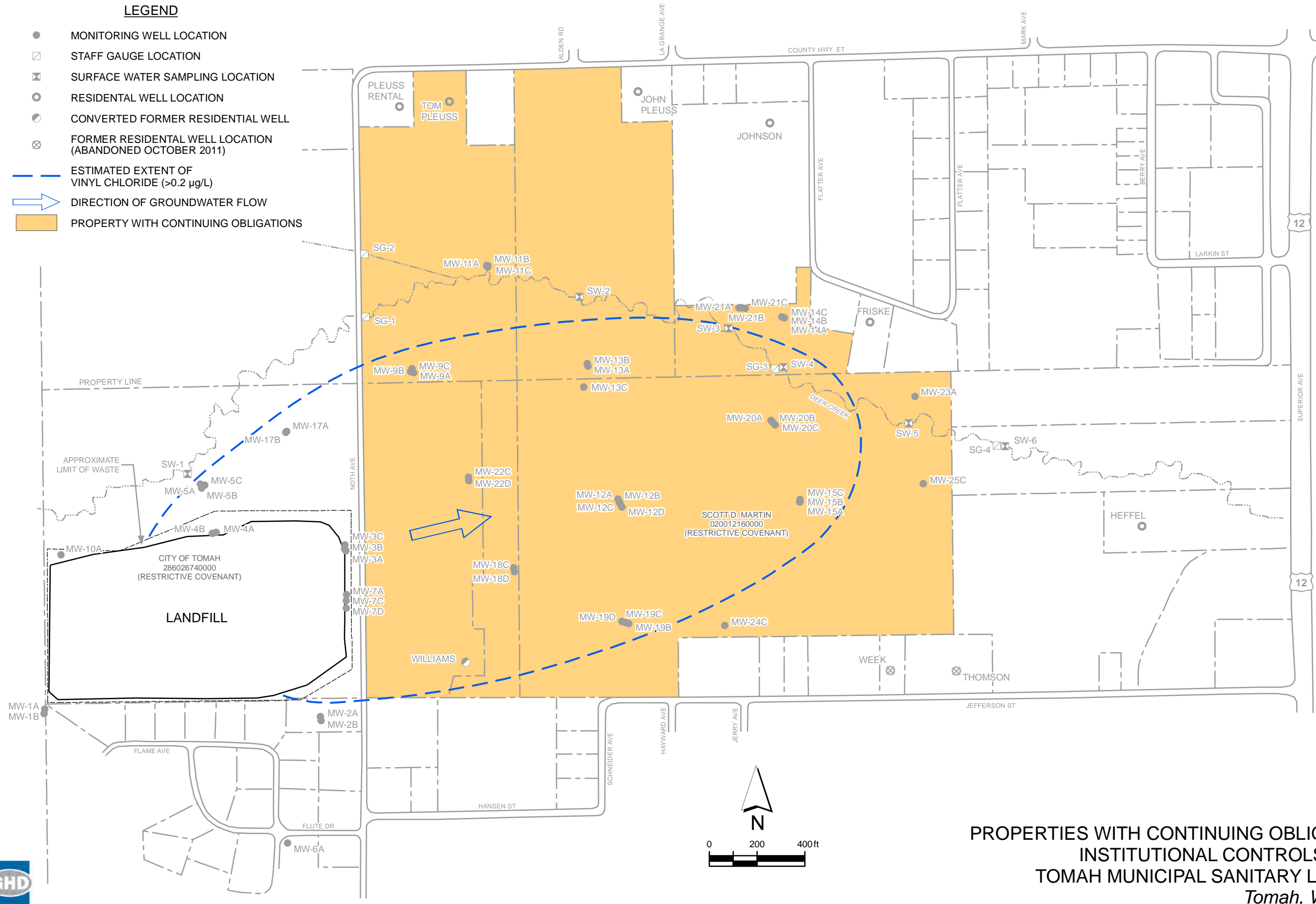


figure 9
**PROPERTIES WITH CONTINUING OBLIGATIONS
 INSTITUTIONAL CONTROLS STUDY
 TOMAH MUNICIPAL SANITARY LANDFILL
 Tomah, Wisconsin**



Table 1

**Revised Long-Term Stewardship Plan
Biennial Institutional Controls Report
Tomah Municipal Sanitary Landfill Superfund Site
Tomah, Wisconsin**

No.	IC	Description	Regulatory Citation	Monitoring Method	Monitoring/Reporting Frequency
1	LSBK	Landfill Setback - Prohibits well installation within 1200-ft from a landfill site.	State of Wisconsin Administrative Code - Chapter NR 812.08	<p>Check for any new building and well construction within the setback zone. Check the WDNR Drinking and Groundwater web site electronic scans of newly submitted well construction forms located in the setback zone: http://prodoasext.dnr.wi.gov/inter1/watr\$.startup</p> <p>Contact WDNR Division of Water, Drinking Water and Groundwater, Private Water Supply Section (current contact is Randell Clark, 608-267-7895) for information about new well construction variances and make sure all new wells have written variances.</p>	Every 2 years.
2	LCAP	Landfill Cap - Prohibits agricultural use, establishment or development of buildings, and excavation of final cover.	State of Wisconsin Administrative Code - Chapter NR 504.07(9)	Inspect landfill cap to check for unauthorized uses.	Every 2 years.
3	MW (CL)	Municipal Water Connection (Within City Limits) - Prohibits use of private domestic wells; Requires City-approved well operation permit or abandonment of private wells; Prohibits new domestic well installation.	City Ordinance Section 46-50; City Ordinance Section 46-101; City of Tomah Ordinance Sections 46-529 and 46-530.	Contact Municipal Water Utility to confirm connections; Conduct well inventory to evaluate abandonment status of potential former private wells; Check the WDNR Drinking and Groundwater website electronic scans of newly submitted well construction forms located in the area of concern: http://prodoasext.dnr.wi.gov/inter1/watr\$.startup	<p><u>a) Water Connections:</u> Every 2 years; <u>b) Well Abandonment:</u> One-time confirmation (i.e.; well inventory conducted 2009/2010); <u>c) Well Construction Permits:</u> Every 2 years.</p>

Table 1

**Revised Long-Term Stewardship Plan
Biennial Institutional Controls Report
Tomah Municipal Sanitary Landfill Superfund Site
Tomah, Wisconsin**

No.	IC	Description	Regulatory Citation	Monitoring Method	Monitoring/Reporting Frequency
4	MW (PA)	Municipal Water Connection (Private Agreements Outside City Limits) - Prohibits use of private domestic wells; Requires abandonment of private wells; Prohibits new domestic well installation.	Private Access Agreements between Property Owners and RPs; State of Wisconsin Administrative Code - Chapter NR 810.16; Public Service Commission (PSC of Wisconsin) regulations.	Contact Municipal Water Utility to confirm connections; Conduct well inventory to evaluate abandonment status of former private wells; Check the WDNR Drinking and Groundwater website electronic scans of newly submitted well construction forms located in the area of concern: http://prodoasext.dnr.wi.gov/inter1/watr\$.startup	a) <u>Water Connections</u> : Every 2 years; b) <u>Well Abandonment</u> : One-time confirmation (i.e.; well inventory conducted 2009/2010); c) <u>Well Construction Permits</u> : Every 2 years.
5	RC/EPE	Restrictive Covenants/Environmental Protective Easements - Prohibits use and installation of private wells; Prohibits building/development (within plume boundary).	Restrictive Covenants and Environmental Protective Easements run with the land and are recorded with the Monroe County Register of Deeds.	a) Contact County Register to confirm Restrictive Covenants are recorded; b) Visually inspect properties for unauthorized well installations/developments (to be conducted during routine sampling events); c) Check the WDNR Drinking and Groundwater website electronic scans of newly submitted well construction forms located in the area of concern: http://prodoasext.dnr.wi.gov/inter1/watr\$.startup	Every 2 years.
6	ZONE	Land Use Restrictions - City of Tomah and Monroe County	City Ordinance Section 52 Monroe County Code of Ordinances - Chapter 47 - Zoning	Contact City Clerk/Monroe County Zoning Administrator to check for zoning change petitions associated with the TMSL and affected properties	Every 2 years.
7	MO	Governmental Controls - Prohibits use of private domestic wells; Requires City-approved well operation permit or abandonment of private wells; Prohibits new domestic well installation.	City Ordinance Section 46-50; City Ordinance Section 46-101; City of Tomah Ordinance Sections 46-529 and 46-530.	Review City of Tomah Ordinances for changes to pertinent municipal ordinances cited in the Biennial IC Report.	Every 2 years.

Table 1

**Revised Long-Term Stewardship Plan
Biennial Institutional Controls Report
Tomah Municipal Sanitary Landfill Superfund Site
Tomah, Wisconsin**

No.	IC	Description	Regulatory Citation	Monitoring Method	Monitoring/Reporting Frequency
8	WI CO	Governmental Controls/Information Devices - Places continuing obligations upon owners of properties overlying the plume of contamination to obtain WDNR approval prior to well construction or reconstruction.	Section 292.12 of WI Statutes and Chapter NR 812 of the WI Administrative Code	Review and improve maps. Review WI Statutes, WI Administrative Codes, and WDNR contaminated Lands Environmental Action Network (CLEAN) for citation changes necessary in Biennial IC Report.	Every 2 years

Note:

- Please refer to Table 1 for a property-by-property summary of all existing and proposed ICs.
- Figure 3 shows each parcel and their existing ICs.

- RC - Restrictive Covenant
- EPE - Environmental Protective Easement
- LSBK - Property (%) within 1200-ft setback distance from landfill (restricted well installation)
- LCAP - Covered Landfill Cap (prohibited agricultural use, establishment or construction of buildings, and excavation of the final cover)
- MW (CL) - Municipal Water (City Limits) - Mandatory connection to City water (requirements for private domestic well abandonment and restricted domestic well installation)
- MW (PA) - Municipal Water (Private Agreement) - Connected to City water per private agreement with RPs (requirements for private domestic well abandonment and restricted domestic well installation)
- ZONE - City of Tomah and Monroe County Land Restrictions
- MO - Municipal Ordinances
- WI CO - State of Wisconsin Continuing Obligations - Obtain prior WDNR approval prior to constructing or reconstructing a well

**Summary of Institutional Controls Investigation/Study
Tomah Municipal Sanitary Landfill Superfund Site
Tomah, Wisconsin**

Property Reference #	Parcel ID	Property Owner	Property Address	Municipality	Within Plume Boundary?	Source of Drinking Water?	PDW Abandoned?	Current ICs	Proposed / Additional ICs	Notes:
GROUP 1 - ALL PARCELS WITHIN THE TMSL PLUME BOUNDARY										
1	286-02674-0000	City of Tomah	UND	City of Tomah	YES (75%)	UND	NO POW	- RC/EPE - LSBK (100%) - LCAP - MW (CL)	- Amended RC/EPE - WI CO	ESD issued 7/1/2015 requires use of government and/or proprietary controls for all properties overlying the TMSL plume. WNDR approves Wisconsin Continuing Obligations under Statute 292.12 at this property on 9/30/15.
2	020-01216-0000	Scott D. Martin	UND	Town of La Grange	YES (64%)	UND	NO POW	- RC/EPE	- Amended RC/EPE for new property owner - WI CO	ESD issued 7/1/2015 requires use of government and/or proprietary controls for all properties overlying the TMSL plume. WNDR approves Wisconsin Continuing Obligations under Statute 292.12 at this property on 9/30/15.
3	020-01215-0000	Roger L. Williams	23671 Co Hwy Et	Town of La Grange	YES (92%)	MW (PA) (connected in 1999)	No PDW	- LSBK (100%) - MW (PA)	- RC/EPE - WI CO	ESD issued 7/1/2015 requires use of government and/or proprietary controls for all properties overlying the TMSL plume. WNDR approves Wisconsin Continuing Obligations under Statute 292.12 at this property on 9/30/15.
4	020-01215-0001 (previously 020-01215-0000)	Ruth A. Hanson (Williams)	23671 Co Hwy Et	Town of La Grange	YES (99%)	MW (PA) (connected in 1999)	NO (currently used as monitoring well)	- LSBK (100%) - MW (PA)	- RC/EPE - ABD - WI CO	ESD issued 7/1/2015 requires use of government and/or proprietary controls for all properties overlying the TMSL plume. WNDR approves Wisconsin Continuing Obligations under Statute 292.12 at this property on 9/30/15.
5	020-01281-0000	Scott Oberbeck & Tammy Gagnon (previously Scott Oberbeck)	UND	Town of La Grange	YES (50%)	MW (PA) (connected in 2011)	YES (2011)	- MW (PA)	- RC/EPE - WI CO	ESD issued 7/1/2015 requires use of government and/or proprietary controls for all properties overlying the TMSL plume. WNDR approves Wisconsin Continuing Obligations under Statute 292.12 at this property on 9/30/15. 8/2015 - Catherine Kemmerling sells property to Scott Oberbeck.
6	020-01209-0000	Thomas R. & Patricia A. Pleuss	PO Box 4	Town of La Grange	YES (20%)	PDW	NO (currently in use)	- LSBK (50%)	- RC/EPE - MW (PA) - ABD - WI CO	ESD issued 7/1/2015 requires use of government and/or proprietary controls for all properties overlying the TMSL plume. WNDR approves Wisconsin Continuing Obligations under Statute 292.12 at this property on 9/30/15. The PDW well is no longer included in the Sampling Program.
7	020-01209-2000	John D. & Mina L. Pleuss	UND	Town of La Grange	YES (25%)	UND	NO POW	- LSBK (10%)	- RC/EPE - WI CO	ESD issued 7/1/2015 requires use of government and/or proprietary controls for all properties overlying the TMSL plume. WNDR approves Wisconsin Continuing Obligations under Statute 292.12 at this property on 9/30/15. The PDW well is no longer included in the Sampling Program.
GROUP 2A - UNDEVELOPED PARCELS OUTSIDE THE TMSL PLUME BOUNDARY AND OUTSIDE CITY LIMITS (WITHIN FOCUS AREA DEFINED BY USEPA/WDNR)										
8	020-01300-2000	Deer Creek Properties, LLC	UND	Town of La Grange	NO	UND	NO POW	None	- RC/EPE	2011 attempt to obtain RC/EPE. RC/EPE to include Parcel ID 020-01300-2000 (Figure ID #8) (declined). April 2012 and April 2014 - Per USEPA request, biennial notification letter sent to property owner regarding potential impact.
9	020-01304-5000	Managed Investments, Inc.	UND	Town of La Grange	NO	UND	NO POW	None	- RC/EPE	2011 attempt to obtain RC/EPE. RC/EPE to include Parcel ID 020-01304-5000 (Figure ID #9) (no response). April 2012 and April 2014 - Per USEPA request, biennial notification letter sent to property owner regarding potential impact.

**Summary of Institutional Controls Investigation/Study
Tomah Municipal Sanitary Landfill Superfund Site
Tomah, Wisconsin**

Property Reference #	Parcel ID	Property Owner	Property Address	Municipality	Within Plume Boundary?	Source of Drinking Water?	PDW Abandoned?	Current ICs	Proposed / Additional ICs	Notes:
10	020-01304-0000	KAS Investments, LLC.	UND	Town of La Grange	NO	UND	NO POW	None	- RC/EPE	Per USEPA request, biennial notification letter sent to property owner regarding potential impact. 5/5/14 - property owner expressed possible interest to install well on property. This information was forwarded to USEPA/WDNR on 5/6/14. City to discuss related zoning with the Town of LaGrange.
GROUP 2B - DEVELOPED PARCELS OUTSIDE THE TMSL PLUME BOUNDARY AND OUTSIDE CITY LIMITS (WITHIN FOCUS AREA DEFINED BY USEPA/WDNR)										
11	020-01210-0000	Thomas R. & Patricia A. Pleuss	24081 Co Hwy Et	Town of La Grange	NO	PDW	NO (currently in use)	None	- RC/EPE - MW (PA) - ABD	The PDW well is no longer included in the Sampling Program.
12	020-01211-0000	John D. Pleuss	24241 Co Hwy Et	Town of La Grange	NO	PDW	NO (currently in use)	None	- RC/EPE - MW (PA) - ABD	The PDW well is no longer included in the Sampling Program.
13	020-01282-0000	Linda Johnson	24011 Flatter Ave	Town of La Grange	NO	PDW	NO (currently in use)	None	- MW (PA) - ABD	Previous offers to connect to municipal water in 2003 and 2010 and to abandon private well in 2010 (declined). PDW will continue to be sampled every 5 years (2013, 2018, etc.). 2016 UPDATE: The PDW well is no longer included in the Sampling Program.
14	020-01284-5000	Larry J. & Jane L. Friske	24173 Flatter Ave	Town of La Grange	NO	PDW	NO (currently in use)	None	- MW (PA) - ABD	PDW will continue to be sampled annually. 2016 UPDATE: Was offered to be connected to city water in July 2014 (declined).
15	020-01288-0000	Hal Jacob (formerly Dianne L. Martin)	24318 Flatter Ave	Town of La Grange	NO	MW (PA) (connected in 2011)	YES (2011)	- MW (PA)	None	Accepted 2010 offer to connect to municipal water and to abandon private well. ICs completed during 2011 construction season.
16	020-01304-1000	David W. Heffel	12363 US Hwy 12	Town of La Grange	NO	PDW	NO (currently in use)	None	- MW (PA) - ABD	PDW will be sampled biennially.
17	020-01302-0000	Martin S. Thomson	24236 Jefferson St	Town of La Grange	NO	MW (PA) (connected in 2011)	YES (2011)	- MW (PA)	None	
18	020-01301-0000	Louann Witt	24178 Jefferson St	Town of La Grange	NO	MW (PA) (connected in 2011)	YES (2011)	- MW (PA)	None	
19	020-01298-0000	Larry J. Baribeau	24310 Flatter Ave	Town of La Grange	NO	MW (PA) (connected in 2003)	YES (2003)	- MW (PA)	None	
20	020-01296-0000	Carey R. Nuttleman	24288 Flatter Ave	Town of La Grange	NO	MW (PA) (connected in 2003)	YES (2003)	- MW (PA)	None	
21	020-01297-0000	Richard L. & Wendy R. Koebernick	24274 Flatter Ave	Town of La Grange	NO	MW (PA) (connected in 2003)	YES (2003)	- MW (PA)	None	
22	020-01292-0000	Craig J. Asen	24238 Flatter Ave	Town of La Grange	NO	MW (PA) (connected in 2003)	YES (2003)	- MW (PA)	None	
23	020-01291-0000	Pamela Sterba	24214 Flatter Ave	Town of La Grange	NO	MW (PA) (connected in 2003)	YES (2003)	- MW (PA)	None	

**Summary of Institutional Controls Investigation/Study
Tomah Municipal Sanitary Landfill Superfund Site
Tomah, Wisconsin**

Property Reference #	Parcel ID	Property Owner	Property Address	Municipality	Within Plume Boundary?	Source of Drinking Water?	PDW Abandoned?	Current ICs	Proposed / Additional ICs	Notes:
24	020-01284-0000	Stanley C. & Helen M. Zdrojowy Revocable Trust	24191 Flatter Ave	Town of La Grange	NO	MW (PA) (connected in 2003)	YES (2003)	- MW (PA)	None	
25	020-01289-0000	Timothy J. & Evelyn R. Kane	24205 Flatter Ave	Town of La Grange	NO	MW (PA) (connected in 2003)	YES (2003)	- MW (PA)	None	
26	020-01299-0000	Kimberly Chambers	24227 Flatter Ave	Town of La Grange	NO	MW (PA) (connected in 2003)	YES (2003)	- MW (PA)	None	
27	020-01290-0000	Murray D. & Helen D. Dingman	24241 Flatter Ave	Town of La Grange	NO	MW (PA) (connected in 2003)	YES (2003)	- MW (PA)	None	
28	020-01294-0000	Ian T. Nelson	24273 Flatter Ave	Town of La Grange	NO	MW (PA) (connected in 2003)	YES (2003)	- MW (PA)	None	
29	020-01287-0000	Ethel M. Robinson	24293 Flatter Ave	Town of La Grange	NO	MW (PA) (connected in 2003)	YES (2003)	- MW (PA)	None	
30	020-01293-0000	Travis L. Reinart	24311 Flatter Ave	Town of La Grange	NO	MW (PA) (connected in 2003)	YES (2003)	- MW (PA)	None	
31	286-02712-3600	Scott Oberbeck & Tammy Gagnon (previously Scott Oberbeck)	855 Flatter Ave	City of Tomah	NO	MW (PA) (connected in 2003)	YES (2003)	- MW (PA) - MW(CL)	- RC/EPE	
GROUP 3A - DEVELOPED PARCELS OUTSIDE TMSL PLUME BOUNDARY AND WITHIN CITY LIMIT (WITHIN FOCUS AREA DEFINED BY USEPA/WDNR)										
32	286-02712-7000	Troy H. Braman	517 Veterans St	City of Tomah	NO	MW (CL) (connected in 1977)	YES (1994)	- MW (CL)	None	
33	286-02712-9003	Bruce G. Puttkammer	711 Jefferson St	City of Tomah	NO	MW (CL) (connected in 1988)	NO PDW (per contact with first home owner in 2011)	- MW (CL)	None	
34	286-02712-9002	Ronald Tornga	715 Jefferson St	City of Tomah	NO	MW (CL) (connected in 1985)	YES	- MW (CL)	None	
35	286-02733-0000	Michael E. Pierce	915 Veterans St	City of Tomah	NO	MW (CL) (connected in 2007)	NO PDW (per well inventory conducted 11/2009)	- MW (CL)	None	
36	286-02712-6000	Mary Ann Komiskey	823 Veterans St	City of Tomah	NO	MW (CL) (connected in 1990)	NO PDW (per well inventory conducted 11/2009)	- MW (CL)	None	
37	286-02712-6500	Alvin & Sandra Janeczko (formerly Alvin R. Janeczko)	813 Veterans St	City of Tomah	NO	MW (CL) (connected in 1993)	NO PDW (per well inventory conducted 11/2009)	- MW (CL)	None	
38	286-02712-8000	Kenneth A. Gorski	803 Veterans St	City of Tomah	NO	MW (CL) (connected in 1987)	NO PDW (per well inventory conducted 11/2009)	- MW (CL)	None	

**Summary of Institutional Controls Investigation/Study
Tomah Municipal Sanitary Landfill Superfund Site
Tomah, Wisconsin**

Property Reference #	Parcel ID	Property Owner	Property Address	Municipality	Within Plume Boundary?	Source of Drinking Water?	PDW Abandoned?	Current ICs	Proposed / Additional ICs	Notes:
39	286-02712-3400	Bible Evangelical Free Church	625 Veterans St	City of Tomah	NO	MW (CL) (connected in 1991)	NO PDW (per well inventory conducted 11/2009)	- MW (CL)	None	
40	286-02712-1046	West Side Plaza Of Tomah, LLC	201 Veterans St	City of Tomah	NO	MW (CL) (connected in 1989)	NO PDW (per well inventory conducted 11/2009)	- MW (CL)	None	
41	286-02712-1500	Dirty Ricks Car Wash & Quick Jerrys Lube, LLC	106 Veterans St	City of Tomah	NO	MW (CL) (connected in 1989)	NO PDW (per well inventory conducted 11/2009)	- MW (CL)	None	
42	286-02712-1044	R.I.A. Federal Credit Union	1024 Superior Ave	City of Tomah	NO	MW (CL) (connected in 1998)	NO PDW (per well inventory conducted 11/2009)	- MW (CL)	None	
43	286-02712-1050	United States Postal Service	1000 Superior Ave	City of Tomah	NO	MW (CL) (connected in 1995)	NO PDW (per well inventory conducted 11/2009)	- MW (CL)	None	
44	286-02712-1048	BP Smokehouse LLC	201 Larkin St	City of Tomah	NO	MW (CL) (connected in 1997)	NO PDW (per well inventory conducted 11/2009)	- MW (CL)	None	
45	286-02712-1150	Tri-Dox Investments, LLP	214 Larkin St	City of Tomah	NO	MW (CL) (connected in 1997)	NO PDW (per well inventory conducted 11/2009)	- MW (CL)	None	2018 UPDATE: Parcel #45 & #54 were combined
46	286-02712-1200	Tomah Area Credit Union	940 Superior Ave	City of Tomah	NO	MW (CL) (connected in 1991)	NO PDW (per well inventory conducted 11/2009)	- MW (CL)	None	
47	286-02712-1010	Deer Creek Properties, LLC	820 Superior Ave	City of Tomah	NO	MW (CL) (connected in 2004)	NO PDW (per well inventory conducted 11/2009)	- MW (CL)	None	
48	286-02713-0000	Eric & Tonya Forrest (formerly Eric Forrest)	215 Jefferson St	City of Tomah	NO	MW (CL) (connected in 1988)	NO PDW (per well inventory conducted 11/2009)	- MW (CL)	None	
49	286-02712-1155	Terry F. Larkin 2001 Revocable Trust	TBD	City of Tomah	NO	NONE	NO PDW (per City of Tomah 3/2012)	- MW (CL)	None	2012 - City of Tomah confirmed that parcel contains only a storage shed, and does not use a private well for drinking water.

**Summary of Institutional Controls Investigation/Study
Tomah Municipal Sanitary Landfill Superfund Site
Tomah, Wisconsin**

Property Reference #	Parcel ID	Property Owner	Property Address	Municipality	Within Plume Boundary?	Source of Drinking Water?	PDW Abandoned?	Current ICs	Proposed / Additional ICs	Notes:
53	286-02712-3000	Wisconsin Power & Light	UND	City of Tomah	NO	NONE	NO PDW (per City of Tomah 3/2012)	- MW (CL)	None	2012 - City of Tomah confirmed that parcel is an electric company substation, and does not use a private well for drinking water.
56	286-02713-1320	J & J Building LLC	1000 Berry Ave	City of Tomah	NO	MW (CL)	NO PDW	- MW (CL)	None	Connected to City water in 2017
56a	286-02713-1319	J & J Building LLC	1002 Berry Ave	City of Tomah	NO	MW (CL)	NO PDW	- MW (CL)	None	Connected to City water in 2017
57	286-02713-1318	Jeffrey & Lisa Boulton	1006 Berry Ave	City of Tomah	NO	MW (CL)	NO PDW	- MW (CL)	None	Connected to City water in 2017
57a	286-02713-1317	James and Gina Gnewikow	1008 Berry Ave	City of Tomah	NO	MW (CL)	NO PDW	- MW (CL)	None	Connected to City water in 2017
58	286-02713-1322	Paul & Sue Gasser	UND	City of Tomah	NO	MW (CL)	NO PDW	- MW (CL)	None	2018 UPDATE: Currently under construction.
59	286-02713-1316	Nan Zheng	1012 Berry Ave	City of Tomah	NO	MW (CL)	NO PDW	- MW (CL)	None	Connected to City water in 2017
59a	286-02713-1315	Nan Zheng	1014 Berry Ave	City of Tomah	NO	MW (CL)	NO PDW	- MW (CL)	None	Connected to City water in 2017
60	286-02713-1314	J & J Building LLC	1016 Berry Ave	City of Tomah	NO	MW (CL)	NO PDW	- MW (CL)	None	Connected to City water in 2017
60a	286-02713-1313	J & J Building LLC	1018 Berry Ave	City of Tomah	NO	MW (CL)	NO PDW	- MW (CL)	None	Connected to City water in 2017
61	286-02713-1324	Mc Nally Spinal Care, LLC	1021 Berry	City of Tomah	NO	MW(CL)	NO PDW	- MW (CL)	None	
62	286-02713-1312	J & J Building LLC	UND	City of Tomah	NO	MW (CL)	NO PDW	- MW (CL)	None	2018 UPDATE: Currently under construction.
63	286-02713-1310	J & J Building LLC	UND	City of Tomah	NO	MW (CL)	NO PDW	- MW (CL)	None	2018 UPDATE: Currently under construction.
64	286-02713-1308	J & J Building LLC	UND	City of Tomah	NO	MW (CL)	NO PDW	- MW (CL)	None	2018 UPDATE: Currently under construction.
65	286-02713-1306	J & J Building LLC	UND	City of Tomah	NO	MW (CL)	NO PDW	- MW (CL)	None	2018 UPDATE: Currently under construction.
66	286-02713-1304	J & J Building LLC	UND	City of Tomah	NO	MW (CL)	NO PDW	- MW (CL)	None	2018 UPDATE: Currently under construction.

**Summary of Institutional Controls Investigation/Study
Tomah Municipal Sanitary Landfill Superfund Site
Tomah, Wisconsin**

Property Reference #	Parcel ID	Property Owner	Property Address	Municipality	Within Plume Boundary?	Source of Drinking Water?	PDW Abandoned?	Current ICs	Proposed / Additional ICs	Notes:
67	286-02713-1302	J & J Building LLC	UND	City of Tomah	NO	MW (CL)	NO PDW	- MW (CL)	None	2018 UPDATE: Currently under construction.
68	286-02713-1300	J & J Building LLC	UND	City of Tomah	NO	MW (CL)	NO PDW	- MW (CL)	None	2018 UPDATE: Currently under construction.
GROUP 3B - UNDEVELOPED PARCELS OUTSIDE TMSL PLUME BOUNDARY AND WITHIN CITY LIMIT (WITHIN FOCUS AREA DEFINED BY USEPA/WDNR)										
50	286-02712-9000	Bruce G. Puttkammer	UND	City of Tomah	NO	UND	NO PDW	- MW (CL)	None	
51	286-02712-9004	Bruce G. Puttkammer	UND	City of Tomah	NO	UND	NO PDW	- MW (CL)	None	
52	286-02713-1000	Managed Investments Inc.	UND	City of Tomah	NO	UND	NO PDW	- MW (CL)	None	
54	286-02712-1049	B. Scott & Mark J. Nicol & Matthews	UND	City of Tomah	NO	UND	NO PDW	- MW (CL)	None	2018 UPDATE: Parcel #45 & #54 were combined
55	286-02712-0115	Tomah Area Credit Union	UND	City of Tomah	NO	UND	NO PDW	- MW (CL)	None	
69	286-02712-1000	Salem Development LLC	UND	City of Tomah	NO	UND	NO PDW	- MW (CL)	None	
69a	286-02712-4010	Hininger Property Management LLC	1028 Berry Ave	City of Tomah	NO	MW (CL)	NO PDW	- MW (CL)	None	Connected to City water in 2017
69b	286-02712-4020	Hininger Real Estate LLC	1010 Berry Ave	City of Tomah	NO	MW (CL)	NO PDW	- MW (CL)	None	Connected to City water in 2017
69c	286-02712-4030	Salem Development LLC	UND	City of Tomah	NO	UND	NO PDW	- MW (CL)	None	
69d	286-02712-4040	Salem Development LLC	UND	City of Tomah	NO	UND	NO PDW	- MW (CL)	None	

**Summary of Institutional Controls Investigation/Study
Tomah Municipal Sanitary Landfill Superfund Site
Tomah, Wisconsin**

Property Reference #	Parcel ID	Property Owner	Property Address	Municipality	Within Plume Boundary?	Source of Drinking Water?	PDW Abandoned?	Current ICs	Proposed / Additional ICs	Notes:
GROUP 4 - SUNNYVALE SUBDIVISION PARCELS (OUTSIDE TMSL PLUME BOUNDARY AND OUTSIDE CITY LIMIT -- CONNECTED TO MUNICIPAL WATER IN 1993 UNDER PRIVATE AGREEMENT WITH RPs)										
70	020-01241-0000	Thomas H. Schmidt	23627 Co Hwy Et	Town of La Grange	NO	MW (PA) (connected in 1993)	YES (2010)	- LSBK (100%) - MW (PA)	None	Well Sealing Record filed as Schmidt
71	020-01245-0000	Philip L. & Dianne M. Schreiner	23626 Co Hwy Et	Town of La Grange	NO	MW (PA) (connected in 1993)	YES (2010)	- LSBK (100%) - MW (PA)	None	Well Sealing Record filed as Lot 2/Schreiner
72	020-01246-0000	Joann K. Cleveland	23604 Co Hwy Et	Town of La Grange	NO	MW (PA) (connected in 1993)	YES (2010)	- LSBK (100%) - MW (PA)	None	Well Sealing Record filed as Lot 3/ Cleveland
73a	020-01247-0000	Kristine M. Dahl	23580 Co Hwy Et	Town of La Grange	NO	MW (PA) (connected in 1993)	YES (2010)	- LSBK (100%) - MW (PA)	None	Well Sealing Record filed as Lot 26/ Henry
73b	020-01247-1000	Kristine M. Dahl	UND	Town of La Grange	NO	UND	NO POW	- LSBK (100%)	None	
74	020-01246-5000	Richard Mann	23692 Flame Ave	Town of La Grange	NO	MW (PA) (connected in 1993)	YES (1998)	- LSBK (100%) - MW (PA)	None	Well Sealing Record filed as Lot 4/Rt 5, Box 103A/Gerhardt.
75	020-01246-7500	Dallas E. Haines	23668 Flame Ave	Town of La Grange	NO	MW (PA) (connected in 1993)	YES (1994)	- LSBK (100%) - MW (PA)	None	Well Sealing Record filed as Lot 5/Rt 5, Box 103B/Burcalow.
76	020-01248-0000	Lisa A. White	23650 Flame Ave	Town of La Grange	NO	MW (PA) (connected in 1993)	YES (2010)	- LSBK (100%) - MW (PA)	None	Well Sealing Record filed as Lot 7 / White 2014 UPDATE: Ownership change - From Lonny J. Shore - Randy Ripp to Lisa A. White
77	020-01248-5000	Robert & Joyce Pulley (formerly Robert J. Pulley)	23624 Flame Ave	Town of La Grange	NO	MW (PA) (connected in 1993)	YES (2010)	- LSBK (100%) - MW (PA)	None	Well Sealing Record filed as Lot 8/ Pulley
78	020-01253-0000	Theodore N. & Carol L. Lauer	23580 Flame Ave	Town of La Grange	NO	MW (PA) (connected in 1993)	YES (1993)	- LSBK (100%) - MW (PA)	None	Well Sealing Record filed as Lot 10/ Lauer
79	020-01252-0000	Richard G. Handy	23562 Flame Ave	Town of La Grange	NO	MW (PA) (connected in 1993)	YES (1993)	- LSBK (100%) - MW (PA)	None	Well Sealing Record filed as Lot 11/ Handy
80	020-01249-0000	Kristine L. Dahl	23550 Flame Ave	Town of La Grange	NO	MW (PA) (connected in 1993)	YES (2010)	- LSBK (100%) - MW (PA)	None	Well Sealing Record filed as Lot 12/Dahl
81	020-01253-2500	Shannon & Melissa Kampmeier (formerly Shannon Kampmeier)	23626 Flute Ave	Town of La Grange	NO	MW (PA) (connected in 1993)	YES (2010)	- LSBK (100%) - MW (PA)	None	Well Sealing Record filed as Lot 44/Scheerer
82	020-01253-5000	Dean R. Waege	23635 Flame Ave	Town of La Grange	NO	MW (PA) (connected in 1993)	YES (2010)	- LSBK (100%) - MW (PA)	None	Well Sealing Record filed as Lot 45/Waege
83	020-01251-0000	John G. & Susan M. Bauerle	23678 Flute Ave	Town of La Grange	NO	MW (PA) (connected in 1993)	YES (2010)	- LSBK (100%) - MW (PA)	None	Well Sealing Record filed as Lot 42/Bauerle
84	020-01250-0000	Kevin Cook & Vicky Stegmaier (formerly Vicky L. Cook)	23695 Flute Ave	Town of La Grange	NO	MW (PA) (connected in 1993)	YES (2010)	- LSBK (100%) - MW (PA)	None	Well Sealing Record filed as Lot 41/ Roscovius

**Summary of Institutional Controls Investigation/Study
Tomah Municipal Sanitary Landfill Superfund Site
Tomah, Wisconsin**

Property Reference #	Parcel ID	Property Owner	Property Address	Municipality	Within Plume Boundary?	Source of Drinking Water?	PDW Abandoned?	Current ICs	Proposed / Additional ICs	Notes:
85	020-01250-5000	James & Teresa Taylor (formerly James W. Taylor)	23671 Flute Ave	Town of La Grange	NO	MW (PA) (connected in 1993)	YES (2010)	- LSBK (100%) - MW (PA)	None	Well Sealing Record filed as Lot 40/Taylor
86	020-01250-2500	Diane Schreck (formerly Robert E. & Melva M. Harkness)	23655 Flute Ave	Town of La Grange	NO	MW (PA) (connected in 1993)	YES (2004)	- LSBK (100%) - MW (PA)	None	Well Sealing Record filed as Harkness
87	020-01250-2000	Robert E. & Melva M. Harkness	UND	Town of La Grange	NO	UND	NO POW	- LSBK (100%)	None	
88a	020-01243-0000	Dennis L. Henry	UND	Town of La Grange	NO	UND	NO POW	- LSBK (100%)	None	
88b	020-01243-0000	Dennis L. Henry	UND	Town of La Grange	NO	UND	NO POW	- LSBK (100%)	None	
89	020-01244-0000	Town of La Grange	UND	Town of La Grange	NO	UND	NO POW	- LSBK (100%)	None	

Notes:

- RC - Restrictive Covenant
- EPE - Environmental Protective Easement
- LSBK - Property (%) within 1200-ft setback distance from landfill (restricted well installation)
- LCAP - Covered Landfill Cap (prohibited agricultural use, establishment or construction of buildings, and excavation of the final cover)
- MW (CL) - Municipal Water (City Limits) - Mandatory connection to City water (requirements for private domestic well abandonment and restricted domestic well installation)
- MW (PA) - Municipal Water (Private Agreement) - Connected to City water per private agreement with RPs (requirements for private domestic well abandonment and restricted domestic well installation)
- ABD - Abandon Existing Private Domestic Well.
- PDW - Private Domestic Well
- UND - Undeveloped Parcel
- TBD - To be Determined
- WI CO - Continuing Obligations - Obtain prior WDNR approval prior to constructing or reconstructing a well

Table 3

**Current Sampling and Analysis Program
Operable Unit 2 (OU2)
Tomah Municipal Sanitary Landfill Superfund Site
Tomah, Wisconsin**

Sample Matrix	Field Parameters	Laboratory Parameters	Investigative Samples	QA Samples ⁽¹⁾				Total Per Round	Current Sampling Frequency
				Field Blanks	Field Duplicates	MS ⁽²⁾	MSD ⁽²⁾		
Groundwater									
Semi-Annual Wells ⁽³⁾	pH, Temperature, Conductivity, DO, Turbidity, Redox (ORP), Iron (II), Sulfide ⁽⁹⁾	VOCs, Dissolved gases ^(8,9) , Alkalinity ⁽⁹⁾ , Chloride ⁽⁹⁾ , Sulfate ⁽⁹⁾ , Total Organic Carbon ⁽⁹⁾	4	1	1	1	1	8	Semi-Annually
Annual Wells ⁽⁴⁾ (in addition to Semi-Annual Wells)	pH, Temperature, Conductivity, DO, Turbidity, Redox (ORP), Iron (II), Sulfide	VOCs, Dissolved gases ⁽⁸⁾ , Alkalinity, Chloride, Sulfate, Total Organic Carbon	21	2	2	1	1	27	Annually
Biennial Wells ⁽⁵⁾ (in addition to Semi-Annual and Annual Wells)	pH, Temperature, Conductivity, DO, Turbidity, Redox (ORP), Iron (II), Sulfide	VOCs, Dissolved gases ⁽⁸⁾ , Alkalinity, Chloride, Sulfate, Total Organic Carbon	19	2	2	1	1	25	Biennially
Residential Wells ^(6,7)	pH, Temperature, Conductivity	VOCs, Chloride	4	1	1	1	1	8	Annually ⁽⁶⁾
Surface Water									
Surface Water ⁽⁸⁾	pH, Temperature, Conductivity, DO, Turbidity, Redox (ORP)	VOCs, Dissolved gases ^(8,9)	4	-	1	-	-	5	Semi-Annually

Table 3

**Current Sampling and Analysis Program
Operable Unit 2 (OU2)
Tomah Municipal Sanitary Landfill Superfund Site
Tomah, Wisconsin**

Notes:

Current Sampling Program, as outlined in GHD's OU1/OU2 Monitoring Report (July 2015), Includes updates from USEPA's letter dated 12/23/2015.

- Semi-Annual sampling will occur in May and November.
 - Annual sampling will occur in May (along with a complete synoptic round of water level measurements).
 - No water levels needed from the MW-9 and MW-11 well nests in even number years (2016, 2018, 2020, etc.).
 - Biennial sampling will occur in May, each odd year (e.g., 2015, 2017, 2019).
 - John Pleuss, Tom Pleuss, and Tom Pleuss Rental will only be sampled if their property is accessed during the sampling round. Written request must be received before sampling.
- 1 One trip blank, which consists of a filled 40-mL preserved glass vial, shall be shipped with each cooler of VOC water samples.
 - 2 Matrix spike/matrix spike duplicate (MS/MSD) analyses are required for organic and inorganic analyses; For MS/MSD samples within a water matrix, triple the normal sample volumes will be collected.
 - 3 Semi-Annual Wells currently include: MW-15C, MW-19C, MW-20A, and MW-20B.
 - 4 Annual Wells currently include: MW-7C, MW-12A, MW-12B, MW-12C, MW-12D, MW-13A, MW-13B, MW-13C, MW-15A, MW-15B, MW-17B, MW-18C, MW-18D, MW-19B, MW-19D, MW-20C, MW-22C, MW-22D, MW-23A, MW-24C, and MW-25C.
 - 5 Biennial Wells currently include: MW-1A, MW-2A, MW-3A, MW-3B, MW-3C, MW-4B, MW-5A, MW-5B, MW-7A, MW-7D, MW-9B, MW-9C, MW-11B, MW-14A, MW-14B, MW-14C, MW-21A, MW-21B, and MW-21C
 - 6 Residential Wells include Larry Friske, David Heffel (biennial), and Ruth Williams (2018, 2023, 2028, etc).
 - 7 Surface water sampling locations currently include: SW-3, SW-4, SW-5, and SW-6.
 - 8 Dissolved gas parameters include: methane and ethene.
 - 9 Measured/Analyzed during the annual round (only).

Attachment A RAR Approval

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
1300 W. Clairemont Ave.
Eau Claire WI 54701

Scott Walker, Governor
Cathy Stepp, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711



RECEIVED
OCT - 6 2015

September 30, 2015

International Paper Company
Attn: Philip J. Slowiak, Sr., CSP
Environmental Remediation
6400 Poplar Avenue
Memphis, TN 38197

City of Tomah
Attn: Roger Gorius
819 Superior Avenue
Tomah, WI 54660

KEEP THIS DOCUMENT WITH YOUR PROPERTY RECORDS

SUBJECT: Approval of Remedial Actions with Continuing Obligations,
Tomah Sanitary Landfill, Noth Avenue and CTH ET, Tomah, WI,
DNR BRRS Activity #: 02-42-000265, FID #: 642009720

Gentlemen:

The Department of Natural Resources ("Department" or DNR) is in receipt of your submittal entitled, "Remedial Action Report – Implementation of Institutional Controls Remedy," dated September 11, 2015, and submitted by GHD on your behalf. The report was received by the DNR on September 14, 2015. A check in the amount of \$1,400 was also received on September 30, 2015, in payment of technical review fees (\$1,050) and Department database fees (\$350), per ch. NR 749 of the Wisconsin Administrative Code, for sites with groundwater contamination that attains or exceeds Chapter NR 140 enforcement standards.

The purpose of this letter is to approve the Remedial Action Report (RAR) cited above, including a proposal for use of "continuing obligations" under Section 292.12 of the Wisconsin Statutes as a component of remedial actions at the Tomah Municipal Sanitary Landfill (TMSL) site. You, future property owners, and occupants of the property must comply with the continuing obligations as explained in the conditions in this letter. Please read over this letter closely to ensure that you comply with all conditions and other on-going requirements. Provide this letter and any attachments listed at the end of this letter to anyone who purchases, rents or leases this property from you. Certain continuing obligations also apply to affected off-source property owners. These are identified in the Continuing Obligations Conditions section below.

This approval is based on the RAR, correspondence, and data provided, and is issued under ch. NR 722.15, Wis. Adm. Code. As stated in the RAR, the proposed remedial actions are intended to supplement, not replace, those components of the remedy that are already in place. The current changes in the remedy are related to institutional control (IC) requirements. ICs are non-engineered instruments, such as administrative and legal controls, that can help to minimize the potential for human exposure to contamination. There are four categories of ICs, which include: proprietary controls (e.g. easements and covenants); governmental controls (e.g. state statutes and administrative codes, or municipal ordinances); enforcement and permit tools (e.g. administrative orders or consent decrees); and information devices (e.g. state registries of contaminated sites). ICs are required to ensure the protectiveness of selected remedies at sites where residual contamination will not allow for unlimited use and unrestricted exposure.

Site Background

The City of Tomah operated the TMSL as a disposal site from 1959 to 1979, disposed of municipal and industrial wastes in shallow, unlined trenches on 18 acres located on the southern portion of the 40-acre parcel, and covered the wastes with native soils. Industrial wastes accepted at the landfill included solvents from plastics and printing operations from the Union Camp Corporation (now International Paper Company). The landfill was closed in 1979, and the DNR subsequently conducted site assessment and inspection activities at the site. Based on the findings of those activities, the United States Environmental Protection Agency (USEPA) placed the TMSL site on the National Priorities List on March 31, 1989.

On September 25, 1997, a Superfund Record of Decision (ROD) was signed which selected an engineered landfill cap and a landfill gas extraction system as remedial actions for source control on the landfill portion of the TMSL site, which was designated as "Operating Unit 1" (OU1). ICs in the form of governmental controls, i.e. state administrative rules limiting land use and restricting wells at former landfills, were already in place on the 18-acre landfill portion of the TMSL property, and a deed restriction was in place on the non-landfill remainder of the 40-acre parcel. Consequently, the 1997 OU1 ROD stated that, "*Institutional controls are not included as part of the selected remedy because deed restrictions on the TMSL property, enforceable by the State of Wisconsin are already in place. The USEPA concluded that no additional controls were necessary to prevent inappropriate use of the site.*" In 2006, the deed restriction on the non-landfill portion of the TMSL property was superseded by a more comprehensive "Environmental Protection Easement and Declaration of Restrictive Covenant" (Easement and Declaration) covering the entire parcel.

A second ROD was signed on September 24, 2003, to address site groundwater contamination, which was designated as "Operating Unit 2" (OU2). The 2003 ROD selected monitored natural attenuation as the OU2 remedy, which uses natural processes, water quality monitoring, testing of Deer Creek, and ICs to restrict the use of groundwater in contaminated areas. The ROD stated that, "*At a minimum, institutional controls in the form of restrictive covenants will be implemented to minimize future human exposure to impacted groundwater. Restrictive covenants prohibiting groundwater from being used as a drinking water source and prohibiting the installation of new wells will be recorded on deeds for property overlying the plume of contamination.*"

After multiple failed attempts to have certain property owners record restrictive covenants on parcels overlying the plume of contamination, the USEPA issued an Explanation of Significant Differences (ESD) on July 1, 2015, to document changes to the types of ICs required by the 1997 and 2003 RODs. The 2015 ESD documents:

- The existing 2006 Easement and Declaration as a necessary component of the OU1 remedy;
- Replacing the OU2 remedy requirement for restrictive covenants on properties overlying the plume of contamination with an IC remedy which requires that, "*At a minimum, institutional controls in the form of governmental controls or proprietary controls will be implemented to minimize future human exposure to impacted groundwater. For property overlying the plume of contamination the governmental controls and/or proprietary controls imposed must:*
 - i) *Prohibit contaminated groundwater from being used as a drinking water source; and/or*
 - ii) *Prohibit the installation of new wells without special approval from the appropriate government regulatory authority.*"
- A plan for specific long-term stewardship procedures in order to monitor, maintain, and enforce the ICs at the Site.

In approving remedial actions, the DNR has authority under Section 292.12 of the Wisconsin Statutes, to impose limitations on a property, in accordance with rules promulgated by the department, to ensure that conditions at the site remain protective of public health, safety and welfare, and the environment. For all properties overlying the

Residual Groundwater Contamination (ch. NR 140, 812, Wis. Adm. Code)

Groundwater contamination greater than enforcement standards is present both on this contaminated property and off this contaminated property, as shown on the **attached map** entitled, "Vinyl Chloride Concentrations in Groundwater," Fig. 2, dated May, 2015. If you intend to construct a new well, or reconstruct an existing well, you will need prior DNR approval. Other affected property owners were also notified of the presence of groundwater contamination. This continuing obligation also applies to the owners of the following affected properties:

24081 County Highway ET, Tomah, WI; Parcel #020-01209-0000
23671 County Highway ET, Tomah, WI; Parcel #020-01215-0000
23671 County Highway ET, Tomah, WI; Parcel #020-01215-0001
855 Flatter Avenue, Tomah, WI; Parcel #020-01281-0000
24054 Jefferson Street, Tomah, WI; Parcel #020-01216-0000
24241 County Highway ET, Tomah, WI; Parcel #020-01209-2000

Depending upon site-specific conditions, construction over contaminated groundwater may result in vapor migration of contaminants into enclosed structures or migration along newly placed underground utility lines. The potential for vapor inhalation and means of mitigation should be evaluated when planning any future redevelopment, and measures should be taken to ensure the continued protection of public health, safety, welfare and the environment at the site.

The DNR appreciates your efforts to restore the environment at this site. If you have any questions regarding this remedial action approval or anything outlined in this letter, please contact Mae Willkom at 715-839-3748, or at mae.willkom@wisconsin.gov.

Sincerely,



Dave Rozeboom
West Central Region Team Supervisor
Remediation & Redevelopment Program

Attachments:

- Vinyl Chloride Concentrations in Groundwater; Fig. 2; May, 2015

cc: Jenny Davison, U.S. EPA Region 5, 77 W. Jackson Blvd. (SR-6J), Chicago, IL 60604
Lisa Poole, GHD, 1801 Old Highway 8 Northwest, Suite 114, St. Paul, MN 55112
Ryan Aamot, P.G., GHD, 1801 Old Highway 8 Northwest, Suite 114, St. Paul, MN 55112
Tom and Patricia Pleuss, 24081 County Highway ET, Tomah, WI 54660
Roger Williams, 23671 County Highway ET, Tomah, WI 54660
Ruth Hanson, 23671 County Highway ET, Tomah, WI 54660
Scott Oberbeck, 855 Flatter Avenue, Tomah, WI 54660
Scott Martin, 23410 County Highway ET, Tomah, WI 54660
John and Mina Pleuss, 24241 County Highway ET, Tomah, WI 54660

plume of contamination at the TMSL where residual groundwater contamination exceeds state enforcement standards (ESs), the State of Wisconsin, under s. 292.12, Wis. Stats., may impose limitations or other conditions related to a property in accordance with Wisconsin Administrative Codes (WAC) NR 722.15, WAC NR 725, WAC NR 727, and WAC NR 812. These rules, directly or indirectly, ensure that if there is groundwater contamination exceeding state ESs, and the property owner plans to construct or reconstruct a water supply well, the owner must obtain prior DNR approval to ensure that any well construction is designed to protect the water supply from contamination. The rules are enforceable by DNR under s. 292.12, Wis. Stats. This letter specifies the conditions, or "continuing obligations" with which any current or future owner of the property must comply to ensure that the site does not pose a threat.

Continuing Obligations and the GIS Registry

Because groundwater contamination is present at or above ch. NR 140, Wis. Adm. Code enforcement standards, this site will be included on the Bureau for Remediation and Redevelopment Tracking System (BRRTS on the Web) at <http://dnr.wi.gov/topic/Brownfields/clean.html>, to provide public notice of residual contamination and of any continuing obligations. The site can also be viewed on the Remediation and Redevelopment Sites Map (RRSM), a map view, under the Geographic Information System (GIS) Registry layer, at the same web address.

All site information is also on file at the West Central Regional DNR office, at 1300 West Clairemont Avenue, Eau Claire, WI 54701. This letter and information that was submitted with your request for remedial action approval can be found as a Portable Document Format (PDF) in BRRTS on the Web.

DNR approval prior to well construction or reconstruction is required for all sites shown on the GIS Registry, in accordance with s. NR 812.09 (4) (w), Wis. Adm. Code. This continuing obligation applies to private drinking water wells and high capacity wells. To obtain approval, complete and submit Form 3300-254 to the DNR Drinking and Groundwater program's regional water supply specialist. This form can be obtained on-line at <http://dnr.wi.gov/topic/wells/documents/3300254.pdf>.

Further details on this requirement are found in the section entitled, Continuing Obligation Conditions below. The DNR fact sheet "Continuing Obligations for Environmental Protection," RR-819, helps to explain a property owner's responsibility for continuing obligations on their property. The fact sheet may be obtained at <http://dnr.wi.gov/files/PDF/pubs/rr/RR819.pdf>.

Continuing Obligation Conditions

Compliance with the requirements of this letter is a responsibility to which you and any subsequent property owners must adhere. DNR staff will conduct periodic prearranged inspections to ensure that the conditions included in this letter are met. If these requirements are not followed, the DNR may take enforcement action under s. 292.12, Wis. Stats. to ensure compliance with the specified requirements, limitations or other conditions related to the property.

Please send any written notifications in accordance with the following requirements to:

Department of Natural Resources
Attn: Remediation and Redevelopment Program Environmental Program Associate
1300 West Clairemont Avenue
Eau Claire, WI 54701

LEGEND

- MONITORING WELL LOCATION
- ☒ STAFF GAUGE
- RESIDENTIAL WELL LOCATION
- CONVERTED FORMER RESIDENTIAL WELL
- ☒ SURFACE WATER SAMPLING LOCATION
- 29 VINYL CHLORIDE CONCENTRATION IN ug/L
- ND NOT DETECTED
- J ESTICATED RESULT
- () DUPLICATE SAMPLE
- NS# NOT SAMPLED (ACCESS DENIED)
- NLS NO LONGER SAMPLED (PER REVISED MONITORING PROGRAM)
- NS NOT SAMPLED
- - - ESTIMATED EXTENT OF VINYL CHLORIDE IN GROUNDWATER (>0.2 ug/L)

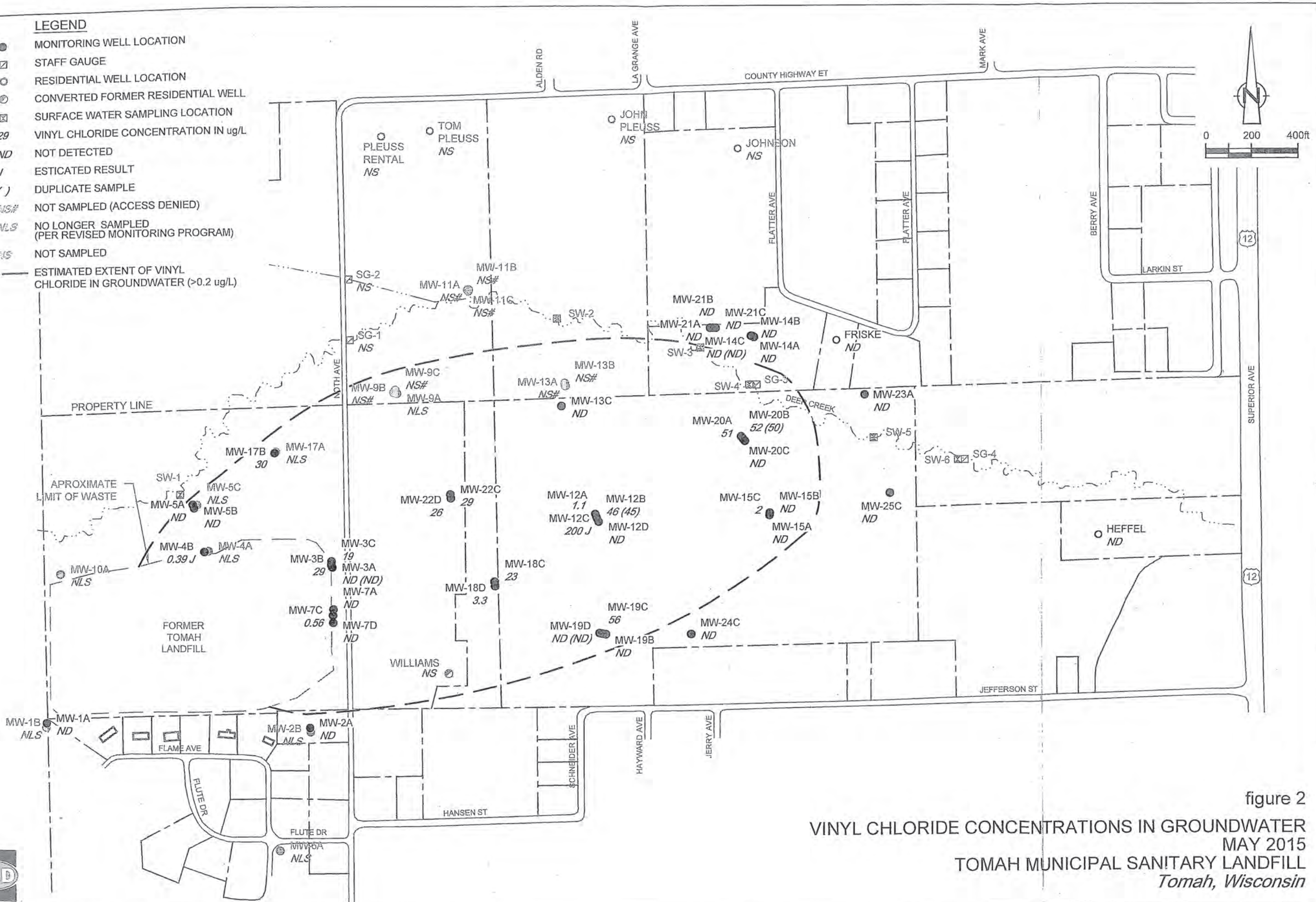


figure 2
 VINYL CHLORIDE CONCENTRATIONS IN GROUNDWATER
 MAY 2015
 TOMAH MUNICIPAL SANITARY LANDFILL
 Tomah, Wisconsin





September 30, 2015

Tom and Patricia Pleuss
24081 County Highway ET
Tomah, WI 54660

SUBJECT: Continuing Obligations and Property Owner Requirements for
24081 County Highway ET, Tomah, Wisconsin
Parcel Identification Number: 020-01209-0000
Remedial Action Approval for Tomah Sanitary Landfill
at Noth Avenue and County Highway ET, Tomah, WI
DNR BRRTS Activity #: 02-42-000265

Dear Mr. and Mrs. Pleuss:

The purpose of this letter is to notify you that certain continuing obligations apply to the property at 24081 County Highway ET, Tomah, WI, (referred to in this letter as the "Property") due to contamination remaining on the Property. The continuing obligations are part of the cleanup and remedial actions approved for the above referenced case, located at Noth Avenue and County Highway ET, Tomah, WI. (The case is referenced by the location of the source property, i.e. the property where the original discharge occurred, prior to contamination migrating to the Property.) The continuing obligations that apply to the Property are stated as conditions in the attached remedial action approval letter, and are consistent with s. 292.12, Wis. Stats., and ch. NR 700, Wis. Adm. Code, rule series. They are meant to limit exposure to any remaining environmental contamination at the Property. These continuing obligations will also apply to future owners of the Property, until the conditions no longer exist at the Property.

It is common for properties to have continuing obligations as part of cleanup approvals. Information on continuing obligations on properties can be found by using the Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the Web. This database is found at <http://dnr.wi.gov/topic/Brownfields/clean.html>. This page also provides information on how to find further information about the remedial action approval and residual contamination, and how to use the map application, RR Sites Map, including the GIS Registry layer, which shows sites with residual contamination and continuing obligations.

The Department reviewed and approved the remedial action approval request regarding the chlorinated solvent contamination in groundwater at this site, based on the information submitted by the Tomah Landfill Group (consisting of the City of Tomah and International Paper Company). As required by state law, you received notification about the requested remedial action approval from the person conducting the cleanup. The remedial action approval decision is conditioned on the long-term compliance with certain continuing obligations, as described below.

Continuing Obligations Applicable to Your Property

Applicable continuing obligations are described in the attached remedial action approval letter to International Paper Company and the City of Tomah, dated September 29, 2015. However, only the following continuing obligations apply to your Property:

Residual Groundwater Contamination (ch. NR 140, 812, Wis. Adm. Code)

Groundwater contamination greater than enforcement standards is present both on this contaminated property and off this contaminated property, as shown on the **attached map** entitled, "Vinyl Chloride Concentrations in Groundwater," Fig. 2, dated May, 2015. If you intend to construct a new well, or reconstruct an existing well, you will need prior DNR approval. See the following paragraph for details.

GIS Registry – Well Construction Approval Needed

Because of the residual groundwater contamination and the continuing obligations, this site, which includes your Property, will be listed on the Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the Web, at <http://dnr.wi.gov/topic/Brownfields/clean.html>. If you intend to construct or reconstruct a well on the Property, you will need to get Department approval in accordance with s. NR 812.09 (4) (w), Wis. Adm. Code. To obtain approval, Form 3300-254 needs to be completed and submitted to the DNR Drinking and Groundwater program's regional water supply specialist. A well driller can help with this form. This form can be obtained on-line at:

<http://dnr.wi.gov/topic/wells/documents/3300254.pdf>. If at some time, all these continuing obligations are fulfilled, and the remaining contamination is either removed or meets applicable standards, you may request the removal of the Property from the GIS Registry.

Property Owner Responsibilities

The owner (you and any subsequent property owner) of this Property is responsible for compliance with these continuing obligations, pursuant to s. 292.12, Wis. Stats. You are required to pass on the information about these continuing obligations to anyone who purchases this property from you (i.e. pass on this letter), in accordance with s. NR 727.05. For residential property transactions, you are required to make disclosures under Wis. Stats. s. 709.02. You may have additional obligations to notify buyers of the condition of the property and the continuing obligations set out in this letter and the remedial action approval letter.

If you lease or rent the property to an occupant who will be responsible for maintaining a continuing obligation, you will need to include that responsibility in a lease agreement, in accordance with s. NR 727.05, Wis. Adm. Code.

Please be aware that failure to comply with the continuing obligations may result in enforcement action by the Department. The Department intends to conduct inspections in the future to ensure that the conditions included in this letter are met.

DNR fact sheet, RR-819, "Continuing Obligations for Environmental Protection" helps explain a property owner's responsibility for continuing obligations on their property. This fact sheet should have been sent to you when you received a notification letter before the remedial action approval request was submitted to the DNR. You may obtain a copy at <http://dnr.wi.gov/files/PDF/pubs/rr/RR819.pdf>.

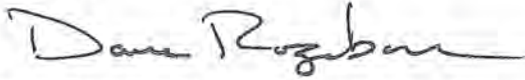
Under s. 292.13, Wis. Stats., owners of properties affected by contamination from another property are generally exempt from investigating or cleaning up a hazardous substance discharge that has migrated onto a property from another property, through the soil, groundwater or sediment pathway. However, the exemption under s. 292.13, Wis. Stats., does not exempt the property owner from the responsibility to maintain a continuing obligation placed on the property in accordance with s. 292.12, Wis. Stats. To maintain this exemption, that statute requires the current property owner and any subsequent property owners, to meet the conditions in the statute, including:

- Granting reasonable access to DNR or responsible party, or their contractors;
- Avoiding interference with response actions taken; and

- Avoiding actions that make the contamination worse (e.g., demolishing a structure and causing or worsening the discharges to the environment).

The Department appreciates your efforts. If you have any questions regarding this remedial action approval or anything outlined in this letter, please contact Mae Willkom at 715-839-3748.

Sincerely,



Dave Rozeboom
West Central Region Remediation & Redevelopment Team Supervisor

Attach. Remedial Action Approval Letter w/location map

cc: International Paper Co., Attn: Philip J. Slowiak, Sr., CSP, 6400 Poplar Ave., Memphis, TN 38197
City of Tomah, Attn: Roger Gorius, 819 Superior Ave., Tomah, WI 54660
Jenny Davison, U.S. EPA Region 5, 77 W. Jackson Blvd. (SR-6J), Chicago, IL 60604
Lisa Poole, GHD, 1801 Old Highway 8 Northwest, Suite 114, St. Paul, MN 55112
Ryan Aamot, P.G., GHD, 1801 Old Highway 8 Northwest, Suite 114, St. Paul, MN 55112



September 30, 2015

Mr. Roger Williams
23671 County Highway ET
Tomah, WI 54660

SUBJECT: Continuing Obligations and Property Owner Requirements for
23671 County Highway ET, Tomah, Wisconsin
Parcel Identification Number: 020-01215-0000
Remedial Action Approval for Tomah Sanitary Landfill
at Noth Avenue and County Highway ET, Tomah, WI
DNR BRRTS Activity #: 02-42-000265

Dear Mr. Williams:

The purpose of this letter is to notify you that certain continuing obligations apply to the property at 23671 County Highway ET, Tomah, WI, (referred to in this letter as the "Property") due to contamination remaining on the Property. The continuing obligations are part of the cleanup and remedial actions approved for the above referenced case, located at Noth Avenue and County Highway ET, Tomah, WI. (The case is referenced by the location of the source property, i.e. the property where the original discharge occurred, prior to contamination migrating to the Property.) The continuing obligations that apply to the Property are stated as conditions in the attached remedial action approval letter, and are consistent with s. 292.12, Wis. Stats., and ch. NR 700, Wis. Adm. Code, rule series. They are meant to limit exposure to any remaining environmental contamination at the Property. These continuing obligations will also apply to future owners of the Property, until the conditions no longer exist at the Property.

It is common for properties to have continuing obligations as part of cleanup approvals. Information on continuing obligations on properties can be found by using the Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the Web. This database is found at <http://dnr.wi.gov/topic/Brownfields/clean.html>. This page also provides information on how to find further information about the remedial action approval and residual contamination, and how to use the map application, RR Sites Map, including the GIS Registry layer, which shows sites with residual contamination and continuing obligations.

The Department reviewed and approved the remedial action approval request regarding the chlorinated solvent contamination in groundwater at this site, based on the information submitted by the Tomah Landfill Group (consisting of the City of Tomah and International Paper Company). As required by state law, you received notification about the requested remedial action approval from the person conducting the cleanup. The remedial action approval decision is conditioned on the long-term compliance with certain continuing obligations, as described below.

Continuing Obligations Applicable to Your Property

Applicable continuing obligations are described in the attached remedial action approval letter to International Paper Company and the City of Tomah, dated September 29, 2015. However, only the following continuing obligations apply to your Property:

Residual Groundwater Contamination (ch. NR 140, 812, Wis. Adm. Code)

Groundwater contamination greater than enforcement standards is present both on this contaminated property and off this contaminated property, as shown on the **attached map** entitled, "Vinyl Chloride Concentrations in Groundwater," Fig. 2, dated May, 2015. If you intend to construct a new well, or reconstruct an existing well, you will need prior DNR approval. See the following paragraph for details.

GIS Registry – Well Construction Approval Needed

Because of the residual groundwater contamination and the continuing obligations, this site, which includes your Property, will be listed on the Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the Web, at <http://dnr.wi.gov/topic/Brownfields/clean.html>. If you intend to construct or reconstruct a well on the Property, you will need to get Department approval in accordance with s. NR 812.09 (4) (w), Wis. Adm. Code. To obtain approval, Form 3300-254 needs to be completed and submitted to the DNR Drinking and Groundwater program's regional water supply specialist. A well driller can help with this form. This form can be obtained on-line at: <http://dnr.wi.gov/topic/wells/documents/3300254.pdf>. If at some time, all these continuing obligations are fulfilled, and the remaining contamination is either removed or meets applicable standards, you may request the removal of the Property from the GIS Registry.

Property Owner Responsibilities

The owner (you and any subsequent property owner) of this Property is responsible for compliance with these continuing obligations, pursuant to s. 292.12, Wis. Stats. You are required to pass on the information about these continuing obligations to anyone who purchases this property from you (i.e. pass on this letter), in accordance with s. NR 727.05. For residential property transactions, you are required to make disclosures under Wis. Stats. s. 709.02. You may have additional obligations to notify buyers of the condition of the property and the continuing obligations set out in this letter and the remedial action approval letter.

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Please be aware that failure to comply with the continuing obligations may result in enforcement action by the Department. The Department intends to conduct inspections in the future to ensure that the conditions included in this letter are met.

DNR fact sheet, RR-819, "Continuing Obligations for Environmental Protection" helps explain a property owner's responsibility for continuing obligations on their property. This fact sheet should have been sent to you when you received a notification letter before the remedial action approval request was submitted to the DNR. You may obtain a copy at <http://dnr.wi.gov/files/PDF/pubs/rr/RR819.pdf>.

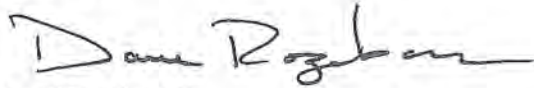
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- Granting reasonable access to DNR or responsible party, or their contractors;
- Avoiding interference with response actions taken; and

- Avoiding actions that make the contamination worse (e.g., demolishing a structure and causing or worsening the discharges to the environment).

The Department appreciates your efforts. If you have any questions regarding this remedial action approval or anything outlined in this letter, please contact Mae Willkom at 715-839-3748.

Sincerely,



Dave Rozeboom
West Central Region Remediation & Redevelopment Team Supervisor

Attach. Remedial Action Approval Letter w/location map

cc: International Paper Co., Attn: Philip J. Slowiak, Sr., CSP, 6400 Poplar Ave., Memphis, TN 38197
City of Tomah, Attn: Roger Gorius, 819 Superior Ave., Tomah, WI 54660
Jenny Davison, U.S. EPA Region 5, 77 W. Jackson Blvd. (SR-6J), Chicago, IL 60604
Lisa Poole, GHD, 1801 Old Highway 8 Northwest, Suite 114, St. Paul, MN 55112
Ryan Aamot, P.G., GHD, 1801 Old Highway 8 Northwest, Suite 114, St. Paul, MN 55112



September 30, 2015

Mr. Scott Oberbeck
855 Flatter Avenue
Tomah, WI 54660

SUBJECT: Continuing Obligations and Property Owner Requirements for
855 Flatter Avenue (south of Deer Creek), Tomah, Wisconsin
Parcel Identification Number: 020-01281-0000
Remedial Action Approval for Tomah Sanitary Landfill
at Noth Avenue and County Highway ET, Tomah, WI
DNR BRRTS Activity #: 02-42-000265

Dear Mr. Oberbeck:

The purpose of this letter is to notify you that certain continuing obligations apply to the property at 855 Flatter Avenue (south of Deer Creek), Tomah, WI, (referred to in this letter as the "Property") due to contamination remaining on the Property. The continuing obligations are part of the cleanup and remedial actions approved for the above referenced case, located at Noth Avenue and County Highway ET, Tomah, WI. (The case is referenced by the location of the source property, i.e. the property where the original discharge occurred, prior to contamination migrating to the Property.) The continuing obligations that apply to the Property are stated as conditions in the attached remedial action approval letter, and are consistent with s. 292.12, Wis. Stats., and ch. NR 700, Wis. Adm. Code, rule series. They are meant to limit exposure to any remaining environmental contamination at the Property. These continuing obligations will also apply to future owners of the Property, until the conditions no longer exist at the Property.

It is common for properties to have continuing obligations as part of cleanup approvals. Information on continuing obligations on properties can be found by using the Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the Web. This database is found at <http://dnr.wi.gov/topic/Brownfields/clean.html>. This page also provides information on how to find further information about the remedial action approval and residual contamination, and how to use the map application, RR Sites Map, including the GIS Registry layer, which shows sites with residual contamination and continuing obligations.

The Department reviewed and approved the remedial action approval request regarding the chlorinated solvent contamination in groundwater at this site, based on the information submitted by the Tomah Landfill Group (consisting of the City of Tomah and International Paper Company). As required by state law, you received notification about the requested remedial action approval from the person conducting the cleanup. The remedial action approval decision is conditioned on the long-term compliance with certain continuing obligations, as described below.

Continuing Obligations Applicable to Your Property

Applicable continuing obligations are described in the attached remedial action approval letter to International Paper Company and the City of Tomah, dated September 29, 2015. However, only the following continuing obligations apply to your Property:

Residual Groundwater Contamination (ch. NR 140, 812, Wis. Adm. Code)

Groundwater contamination greater than enforcement standards is present both on this contaminated property and off this contaminated property, as shown on the **attached map** entitled, "Vinyl Chloride Concentrations in Groundwater," Fig. 2, dated May, 2015. If you intend to construct a new well, or reconstruct an existing well, you will need prior DNR approval. See the following paragraph for details.

GIS Registry – Well Construction Approval Needed

Because of the residual groundwater contamination and the continuing obligations, this site, which includes your Property, will be listed on the Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the Web, at <http://dnr.wi.gov/topic/Brownfields/clean.html>. If you intend to construct or reconstruct a well on the Property, you will need to get Department approval in accordance with s. NR 812.09 (4) (w), Wis. Adm. Code. To obtain approval, Form 3300-254 needs to be completed and submitted to the DNR Drinking and Groundwater program's regional water supply specialist. A well driller can help with this form. This form can be obtained on-line at:

<http://dnr.wi.gov/topic/wells/documents/3300254.pdf>. If at some time, all these continuing obligations are fulfilled, and the remaining contamination is either removed or meets applicable standards, you may request the removal of the Property from the GIS Registry.

Property Owner Responsibilities

The owner (you and any subsequent property owner) of this Property is responsible for compliance with these continuing obligations, pursuant to s. 292.12, Wis. Stats. You are required to pass on the information about these continuing obligations to anyone who purchases this property from you (i.e. pass on this letter), in accordance with s. NR 727.05. For residential property transactions, you are required to make disclosures under Wis. Stats. s. 709.02. You may have additional obligations to notify buyers of the condition of the property and the continuing obligations set out in this letter and the remedial action approval letter.

If you lease or rent the property to an occupant who will be responsible for maintaining a continuing obligation, you will need to include that responsibility in a lease agreement, in accordance with s. NR 727.05, Wis. Adm. Code.

Please be aware that failure to comply with the continuing obligations may result in enforcement action by the Department. The Department intends to conduct inspections in the future to ensure that the conditions included in this letter are met.

DNR fact sheet, RR-819, "Continuing Obligations for Environmental Protection" helps explain a property owner's responsibility for continuing obligations on their property. This fact sheet should have been sent to you when you received a notification letter before the remedial action approval request was submitted to the DNR. You may obtain a copy at <http://dnr.wi.gov/files/PDF/pubs/rr/RR819.pdf>.

Under s. 292.13, Wis. Stats., owners of properties affected by contamination from another property are generally exempt from investigating or cleaning up a hazardous substance discharge that has migrated onto a property from another property, through the soil, groundwater or sediment pathway. However, the exemption under s. 292.13, Wis. Stats., does not exempt the property owner from the responsibility to maintain a continuing obligation placed on the property in accordance with s. 292.12, Wis. Stats. To maintain this exemption, that statute requires the current property owner and any subsequent property owners, to meet the conditions in the statute, including:

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- Avoiding interference with response actions taken; and

- Avoiding actions that make the contamination worse (e.g., demolishing a structure and causing or worsening the discharges to the environment).

The Department appreciates your efforts. If you have any questions regarding this remedial action approval or anything outlined in this letter, please contact Mae Willkom at 715-839-3748.

Sincerely,



Dave Rozeboom
West Central Region Remediation & Redevelopment Team Supervisor

Attach. Remedial Action Approval Letter w/location map

cc: International Paper Co., Attn: Philip J. Slowiak, Sr., CSP, 6400 Poplar Ave., Memphis, TN 38197
City of Tomah, Attn: Roger Gorius, 819 Superior Ave., Tomah, WI 54660
Jenny Davison, U.S. EPA Region 5, 77 W. Jackson Blvd. (SR-6J), Chicago, IL 60604
Lisa Poole, GHD, 1801 Old Highway 8 Northwest, Suite 114, St. Paul, MN 55112
Ryan Aamot, P.G., GHD, 1801 Old Highway 8 Northwest, Suite 114, St. Paul, MN 55112



September 30, 2015

Mr. Scott Martin
23410 County Highway ET
Tomah, WI 54660

SUBJECT: Continuing Obligations and Property Owner Requirements for
24054 Jefferson Street, Tomah, Wisconsin
Parcel Identification Number: 020-01216-0000
Remedial Action Approval for Tomah Sanitary Landfill
at Noth Avenue and County Highway ET, Tomah, WI
DNR BRRTS Activity #: 02-42-000265

Dear Mr. Martin:

The purpose of this letter is to notify you that certain continuing obligations apply to the property at 24054 Jefferson Street, Tomah, WI, (referred to in this letter as the "Property") due to contamination remaining on the Property. The continuing obligations are part of the cleanup and remedial actions approved for the above referenced case, located at Noth Avenue and County Highway ET, Tomah, WI. (The case is referenced by the location of the source property, i.e. the property where the original discharge occurred, prior to contamination migrating to the Property.) The continuing obligations that apply to the Property are stated as conditions in the attached remedial action approval letter, and are consistent with s. 292.12, Wis. Stats., and ch. NR 700, Wis. Adm. Code, rule series. They are meant to limit exposure to any remaining environmental contamination at the Property. These continuing obligations will also apply to future owners of the Property, until the conditions no longer exist at the Property.

It is common for properties to have continuing obligations as part of cleanup approvals. Information on continuing obligations on properties can be found by using the Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the Web. This database is found at <http://dnr.wi.gov/topic/Brownfields/clean.html>. This page also provides information on how to find further information about the remedial action approval and residual contamination, and how to use the map application, RR Sites Map, including the GIS Registry layer, which shows sites with residual contamination and continuing obligations.

The Department reviewed and approved the remedial action approval request regarding the chlorinated solvent contamination in groundwater at this site, based on the information submitted by the Tomah Landfill Group (consisting of the City of Tomah and International Paper Company). As required by state law, you received notification about the requested remedial action approval from the person conducting the cleanup. The remedial action approval decision is conditioned on the long-term compliance with certain continuing obligations, as described below.

Continuing Obligations Applicable to Your Property

Applicable continuing obligations are described in the attached remedial action approval letter to International Paper Company and the City of Tomah, dated September 29, 2015. However, only the following continuing obligations apply to your Property:

Residual Groundwater Contamination (ch. NR 140, 812, Wis. Adm. Code)

Groundwater contamination greater than enforcement standards is present both on this contaminated property and off this contaminated property, as shown on the **attached map** entitled, "Vinyl Chloride Concentrations in Groundwater," Fig. 2, dated May, 2015. If you intend to construct a new well, or reconstruct an existing well, you will need prior DNR approval. See the following paragraph for details.

GIS Registry – Well Construction Approval Needed

Because of the residual groundwater contamination and the continuing obligations, this site, which includes your Property, will be listed on the Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the Web, at <http://dnr.wi.gov/topic/Brownfields/clean.html>. If you intend to construct or reconstruct a well on the Property, you will need to get Department approval in accordance with s. NR 812.09 (4) (w), Wis. Adm. Code. To obtain approval, Form 3300-254 needs to be completed and submitted to the DNR Drinking and Groundwater program's regional water supply specialist. A well driller can help with this form. This form can be obtained on-line at: <http://dnr.wi.gov/topic/wells/documents/3300254.pdf>. If at some time, all these continuing obligations are fulfilled, and the remaining contamination is either removed or meets applicable standards, you may request the removal of the Property from the GIS Registry.

Property Owner Responsibilities

The owner (you and any subsequent property owner) of this Property is responsible for compliance with these continuing obligations, pursuant to s. 292.12, Wis. Stats. You are required to pass on the information about these continuing obligations to anyone who purchases this property from you (i.e. pass on this letter), in accordance with s. NR 727.05. For residential property transactions, you are required to make disclosures under Wis. Stats. s. 709.02. You may have additional obligations to notify buyers of the condition of the property and the continuing obligations set out in this letter and the remedial action approval letter.

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Please be aware that failure to comply with the continuing obligations may result in enforcement action by the Department. The Department intends to conduct inspections in the future to ensure that the conditions included in this letter are met.

DNR fact sheet, RR-819, "Continuing Obligations for Environmental Protection" helps explain a property owner's responsibility for continuing obligations on their property. This fact sheet should have been sent to you when you received a notification letter before the remedial action approval request was submitted to the DNR. You may obtain a copy at <http://dnr.wi.gov/files/PDF/pubs/rr/RR819.pdf>.

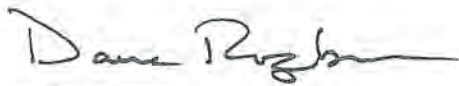
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The Department appreciates your efforts. If you have any questions regarding this remedial action approval or anything outlined in this letter, please contact Mae Willkom at 715-839-3748.

Sincerely,



Dave Rozeboom
West Central Region Remediation & Redevelopment Team Supervisor

Attach. Remedial Action Approval Letter w/location map

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City of Tomah, Attn: Roger Gorius, 819 Superior Ave., Tomah, WI 54660
Jenny Davison, U.S. EPA Region 5, 77 W. Jackson Blvd. (SR-6J), Chicago, IL 60604
Lisa Poole, GHD, 1801 Old Highway 8 Northwest, Suite 114, St. Paul, MN 55112
Ryan Aamot, P.G., GHD, 1801 Old Highway 8 Northwest, Suite 114, St. Paul, MN 55112



September 30, 2015

John and Mina Pleuss
24241 County Highway ET
Route 6, Box 442
Tomah, WI 54660

SUBJECT: Continuing Obligations and Property Owner Requirements for
24241 County Highway ET, Tomah, Wisconsin
Parcel Identification Number: 020-01209-2000
Remedial Action Approval for Tomah Sanitary Landfill
at Noth Avenue and County Highway ET, Tomah, WI
DNR BRRTS Activity #: 02-42-000265

Dear Mr. and Mrs. Pleuss:

The purpose of this letter is to notify you that certain continuing obligations apply to the property at 24241 County Highway ET, Tomah, WI, (referred to in this letter as the "Property") due to contamination remaining on the Property. The continuing obligations are part of the cleanup and remedial actions approved for the above referenced case, located at Noth Avenue and County Highway ET, Tomah, WI. (The case is referenced by the location of the source property, i.e. the property where the original discharge occurred, prior to contamination migrating to the Property.) The continuing obligations that apply to the Property are stated as conditions in the attached remedial action approval letter, and are consistent with s. 292.12, Wis. Stats., and ch. NR 700, Wis. Adm. Code, rule series. They are meant to limit exposure to any remaining environmental contamination at the Property. These continuing obligations will also apply to future owners of the Property, until the conditions no longer exist at the Property.

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The Department reviewed and approved the remedial action approval request regarding the chlorinated solvent contamination in groundwater at this site, based on the information submitted by the Tomah Landfill Group (consisting of the City of Tomah and International Paper Company). As required by state law, you received notification about the requested remedial action approval from the person conducting the cleanup. The remedial action approval decision is conditioned on the long-term compliance with certain continuing obligations, as described below.

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DNR fact sheet, RR-819, "Continuing Obligations for Environmental Protection" helps explain a property owner's responsibility for continuing obligations on their property. This fact sheet should have been sent to you when you received a notification letter before the remedial action approval request was submitted to the DNR. You may obtain a copy at <http://dnr.wi.gov/files/PDF/pubs/rr/RR819.pdf>.

Under s. 292.13, Wis. Stats., owners of properties affected by contamination from another property are generally exempt from investigating or cleaning up a hazardous substance discharge that has migrated onto a property from another property, through the soil, groundwater or sediment pathway. However, the exemption under s. 292.13, Wis. Stats., does not exempt the property owner from the responsibility to maintain a continuing obligation placed on the property in accordance with s. 292.12, Wis. Stats. To maintain this exemption, that statute requires the current property owner and any subsequent property owners, to meet the conditions in the statute, including:

- Granting reasonable access to DNR or responsible party, or their contractors;
- Avoiding interference with response actions taken; and

- Avoiding actions that make the contamination worse (e.g., demolishing a structure and causing or worsening the discharges to the environment).

The Department appreciates your efforts. If you have any questions regarding this remedial action approval or anything outlined in this letter, please contact Mae Willkom at 715-839-3748.

Sincerely,



Dave Rozeboom
West Central Region Remediation & Redevelopment Team Supervisor

Attach. Remedial Action Approval Letter w/location map

cc: International Paper Co., Attn: Philip J. Slowiak, Sr., CSP, 6400 Poplar Ave., Memphis, TN 38197
City of Tomah, Attn: Roger Gorius, 819 Superior Ave., Tomah, WI 54660
Jenny Davison, U.S. EPA Region 5, 77 W. Jackson Blvd. (SR-6J), Chicago, IL 60604
Lisa Poole, GHD, 1801 Old Highway 8 Northwest, Suite 114, St. Paul, MN 55112
Ryan Aamot, P.G., GHD, 1801 Old Highway 8 Northwest, Suite 114, St. Paul, MN 55112



September 30, 2015

Ms. Ruth Hanson
23671 County Highway ET
Tomah, WI 54660

SUBJECT: Continuing Obligations and Property Owner Requirements for
23671 County Highway ET, Tomah, Wisconsin
Parcel Identification Number: 020-01215-0001
Remedial Action Approval for Tomah Sanitary Landfill,
at Noth Avenue and County Highway ET, Tomah, WI
DNR BRRTS Activity #: 02-42-000265

Dear Ms. Hanson:

The purpose of this letter is to notify you that certain continuing obligations apply to the property at 23671 County Highway ET, Tomah, WI, (referred to in this letter as the "Property") due to contamination remaining on the Property. The continuing obligations are part of the cleanup and remedial actions approved for the above referenced case, located at Noth Avenue and County Highway ET, Tomah, WI. (The case is referenced by the location of the source property, i.e. the property where the original discharge occurred, prior to contamination migrating to the Property.) The continuing obligations that apply to the Property are stated as conditions in the attached remedial action approval letter, and are consistent with s. 292.12, Wis. Stats., and ch. NR 700, Wis. Adm. Code, rule series. They are meant to limit exposure to any remaining environmental contamination at the Property. These continuing obligations will also apply to future owners of the Property, until the conditions no longer exist at the Property.

It is common for properties to have continuing obligations as part of cleanup approvals. Information on continuing obligations on properties can be found by using the Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the Web. This database is found at <http://dnr.wi.gov/topic/Brownfields/clean.html>. This page also provides information on how to find further information about the remedial action approval and residual contamination, and how to use the map application, RR Sites Map, including the GIS Registry layer, which shows sites with residual contamination and continuing obligations.

The Department reviewed and approved the remedial action approval request regarding the chlorinated solvent contamination in groundwater at this site, based on the information submitted by the Tomah Landfill Group (consisting of the City of Tomah and International Paper Company). As required by state law, you received notification about the requested remedial action approval from the person conducting the cleanup. The remedial action approval decision is conditioned on the long-term compliance with certain continuing obligations, as described below.

Continuing Obligations Applicable to Your Property

Applicable continuing obligations are described in the attached remedial action approval letter to International Paper Company and the City of Tomah, dated September 29, 2015. However, only the following continuing obligations apply to your Property:

Residual Groundwater Contamination (ch. NR 140, 812, Wis. Adm. Code)

Groundwater contamination greater than enforcement standards is present both on this contaminated property and off this contaminated property, as shown on the **attached map** entitled, "Vinyl Chloride Concentrations in Groundwater," Fig. 2, dated May, 2015. If you intend to construct a new well, or reconstruct an existing well, you will need prior DNR approval. See the following paragraph for details.

GIS Registry – Well Construction Approval Needed

Because of the residual groundwater contamination and the continuing obligations, this site, which includes your Property, will be listed on the Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the Web, at <http://dnr.wi.gov/topic/Brownfields/clean.html>. If you intend to construct or reconstruct a well on the Property, you will need to get Department approval in accordance with s. NR 812.09 (4) (w), Wis. Adm. Code. To obtain approval, Form 3300-254 needs to be completed and submitted to the DNR Drinking and Groundwater program's regional water supply specialist. A well driller can help with this form. This form can be obtained on-line at: <http://dnr.wi.gov/topic/wells/documents/3300254.pdf>. If at some time, all these continuing obligations are fulfilled, and the remaining contamination is either removed or meets applicable standards, you may request the removal of the Property from the GIS Registry.

Property Owner Responsibilities

The owner (you and any subsequent property owner) of this Property is responsible for compliance with these continuing obligations, pursuant to s. 292.12, Wis. Stats. You are required to pass on the information about these continuing obligations to anyone who purchases this property from you (i.e. pass on this letter), in accordance with s. NR 727.05. For residential property transactions, you are required to make disclosures under Wis. Stats. s. 709.02. You may have additional obligations to notify buyers of the condition of the property and the continuing obligations set out in this letter and the remedial action approval letter.

If you lease or rent the property to an occupant who will be responsible for maintaining a continuing obligation, you will need to include that responsibility in a lease agreement, in accordance with s. NR 727.05, Wis. Adm. Code.

Please be aware that failure to comply with the continuing obligations may result in enforcement action by the Department. The Department intends to conduct inspections in the future to ensure that the conditions included in this letter are met.

DNR fact sheet, RR-819, "Continuing Obligations for Environmental Protection" helps explain a property owner's responsibility for continuing obligations on their property. This fact sheet should have been sent to you when you received a notification letter before the remedial action approval request was submitted to the DNR. You may obtain a copy at <http://dnr.wi.gov/files/PDF/pubs/rr/RR819.pdf>.

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The Department appreciates your efforts. If you have any questions regarding this remedial action approval or anything outlined in this letter, please contact Mae Willkom at 715-839-3748.

Sincerely,



Dave Rozeboom
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Attachment B Government Controls

Chapter NR 504

LANDFILL LOCATION, PERFORMANCE, DESIGN AND CONSTRUCTION CRITERIA

NR 504.01	Purpose.	NR 504.08	Minimum design and construction criteria for landfill gas extraction systems.
NR 504.02	Applicability.	NR 504.09	Storm water management and miscellaneous design and construction criteria for landfills.
NR 504.03	Definitions.	NR 504.095	Design criteria for landfills that recirculate leachate.
NR 504.04	Landfill locational criteria and performance standards.	NR 504.10	Alternative design criteria for landfills accepting high volume industrial wastes.
NR 504.05	General design and construction criteria.	NR 504.11	Minimum design and construction criteria for landfills accepting residue produced by burning municipal solid waste.
NR 504.06	Minimum design and construction criteria for landfill liners and leachate collection systems.		
NR 504.07	Minimum design and construction criteria for final cover systems.		
NR 504.075	Soil borrow sources.		

Note: Corrections made under s. 13.93 (2m) (b) 7., Register, August, 1997, No. 500.

NR 504.01 Purpose. The purpose of this chapter is to help ensure that efficient, nuisance-free and environmentally acceptable solid waste management procedures are practiced in this state and to provide information on locational criteria, performance standards and the minimum design and construction requirements for landfills. This chapter is adopted under ch. 289, Stats., and s. 227.11, Stats.

History: Cr. Register, January, 1988, No. 385, eff. 2-6-88; am., Register, June, 1996, No. 486, eff. 7-1-96.

NR 504.02 Applicability. (1) Except as otherwise provided, this chapter governs all landfills as defined in s. 289.01 (20), Stats., except landspreading facilities regulated under ch. NR 518, small demolition waste landfills regulated under ch. NR 503, hazardous waste facilities as defined in s. 291.01 (8), Stats., and regulated under chs. NR 660 to 679; metallic mining operations for nonferrous minerals as defined in s. 293.01 (9), Stats., and regulated under ch. NR 182; and metallic mining operations for ferrous minerals as defined in s. 295.41 (26), Stats., including mining wastes and mining waste sites as defined in s. 295.41 (30) and (31), Stats., and regulated under subch. III of ch. 295, Stats.

(2) This chapter does not apply to the design, construction or operation of industrial wastewater facilities, sewerage systems and waterworks treating liquid wastes approved under s. 281.41, Stats., or permitted under ch. 283, Stats., nor to facilities used solely for the disposal of liquid municipal or industrial wastes which have been approved under s. 281.41, Stats., or permitted under ch. 283, Stats., except for facilities used for the disposal of solid waste.

Note: Owners or operators proposing to site a new or expand an existing municipal solid waste landfill within a 5 mile radius of any airport runway end used by turbojet or piston type aircraft must notify the owner or operator of the affected airport and the federal aviation administration (FAA).

History: Cr. Register, January, 1988, No. 385, eff. 2-6-88; correction in (1) made under s. 13.93 (2m) (b) 7., Stats., Register, May, 1995, No. 473; am. (1), Register, June, 1996, No. 486, eff. 7-1-96; am. (1), Register, August, 1997, No. 500, eff. 9-1-97; correction in (2) made under s. 13.93 (2m) (b) 7., Stats., Register March 2003 No. 567; correction in (1) made under s. 13.93 (2m) (b) 7., Stats., Register December 2006 No. 612; CR 13-057; am. (1) Register July 2015 No. 715, eff. 8-1-15.

NR 504.03 Definitions. The terms in this chapter are defined in s. NR 500.03.

History: Cr. Register, January, 1988, No. 385, eff. 2-6-88.

NR 504.04 Landfill locational criteria and performance standards. (1) GENERAL. As part of the feasibility report required under ch. NR 512 an applicant shall demonstrate to the department that the proposed landfill will comply with all of the locational criteria and performance standards of this section unless an exemption is granted.

(2) EXEMPTIONS. (a) Exemptions from compliance with subs. (3) (a), (b), (d), (e), (f), (g), (h), (i) and (4) (b), (e) and (f) may be granted by the department only upon demonstration by the appli-

cant of circumstances which warrant an exemption. Compliance with sub. (4) (a) shall be evaluated in accordance with the standards in ch. NR 103. For the purpose of determining whether there is a practicable alternative to a proposed landfill expansion under s. NR 103.08, the department may allow an applicant to limit its analysis of alternatives to alternatives within the boundaries of the property where the existing landfill is located and on property immediately adjacent to the existing landfill. Exemptions from compliance with subs. (3) (c) and (4) (c) may not be granted. Exemptions from compliance with sub. (4) (d) may be granted only according to the procedures set forth in chs. NR 507 and 140. Exemptions from compliance with sub. (3) (f) will be based on an evaluation of the information contained in par. (b). However, no exemptions from sub. (3) (f) may be granted unless information on the well location, current and immediate past well owners, well driller, well log and construction details, the general hydrogeologic setting and a completed s. NR 812.43 variance request is submitted to the department. Exemptions from sub. (3) (f) shall be requested by the applicant and re-evaluated for each subsequent expansion proposal. Exemptions from sub. (3) (i) may be granted only if the applicant demonstrates that engineering measures have been incorporated into the landfill's design to ensure that the integrity of the structural components of the landfill will not be disrupted.

Note: Contact the groundwater expert or water supply specialist in the local DNR office to obtain a list of the current requirements for a completed s. NR 812.43 variance request. To determine who is the appropriate contact in a particular part of the state either call (608) 266-0821 or e-mail the Drinking Water and Groundwater program at DG.Mail@dnr.state.wi.us.

(b) Additional factors which may be considered by the department in determining whether or not to grant exemptions under this section include waste types, characteristics and quantities; the geology and hydrogeology of the landfill; the proposed landfill design and operation; the availability of other environmentally suitable alternatives; status of the s. NR 812.43 variance application; compliance with other state and federal regulations and the health, safety and welfare of the public. Requests for exemptions and information needed to demonstrate the circumstances that warrant exemptions shall be addressed by the applicant in the feasibility report.

(3) LOCATIONAL CRITERIA. No person may establish, construct, operate, maintain or permit the use of property for a landfill where the limits of filling are or would be within the following areas:

(a) Within 1,000 feet of any navigable lake, pond or flowage not including landfill drainage or sedimentation control structures.

(b) Within 300 feet of any navigable river or stream.

(c) Within a floodplain.

(d) Within 1,000 feet of the nearest edge of the right-of-way of any state trunk highway, interstate or federal aid primary highway or the boundary of any public park or state natural area, unless

the landfill is screened by natural objects, plantings, fences or other appropriate means so that it is not visible from the highway, park or natural area.

(e) Within an area where the design or operation of the landfill would pose a significant bird hazard to aircraft.

1. A landfill which is proposed to be located within 10,000 feet of any airport runway end designed or planned to be designed and used by turbojet aircraft or within 5,000 feet of any airport runway end designed for and used only by piston type aircraft and which is proposed to be used for the disposal of putrescible waste shall be presumed to pose a significant bird hazard to aircraft unless the applicant can demonstrate to the satisfaction of the department that the landfill will not pose a significant bird hazard to aircraft.

2. A landfill used for the disposal of putrescible waste which is in existence on July 1, 1996, and which is located within 10,000 feet of any airport runway end used or planned to be used by turbojet aircraft or within 5,000 feet of any runway end used by only piston-type aircraft shall be closed by October 9, 1996 unless the owner or operator of the landfill demonstrates to the satisfaction of the department that the landfill will not pose a significant hazard to aircraft. The deadline for closure may be extended by the department by up to 2 years if the owner or operator demonstrates that there is no available alternative disposal capacity and there is no immediate threat to human health and the environment.

Note: Owners or operators proposing to site a new or expand an existing municipal solid waste landfill within a 5 mile radius of any airport runway end used by turbojet or piston type aircraft must notify the owner or operator of the affected airport and the federal aviation administration (FAA).

(f) Within 1,200 feet of any public or private water supply well.

(g) Within 200 feet of a fault that has had displacement in Holocene time.

(h) Within seismic impact zones.

(i) Within unstable areas.

(4) PERFORMANCE STANDARDS. No person may establish, construct, operate, maintain or permit the use of property for a landfill if there is a reasonable probability that the landfill will cause:

(a) A significant adverse impact on wetlands as provided in ch. NR 103.

(b) A take of an endangered or threatened species in accordance with s. 29.604, Stats.

(c) A detrimental effect on any surface water.

(d) A detrimental effect on groundwater quality or will cause or exacerbate an attainment or exceedance of any preventive action limit or enforcement standard at a point of standards application as defined in ch. NR 140. For the purposes of design the point of standards application is defined by s. NR 140.22 (1).

(e) The migration and concentration of explosive gases in any landfill structures excluding the leachate collection system or gas control or recovery system components in excess of 25% of the lower explosive limit for such gases at any time. The migration and concentration of explosive gases in the soils outside of the limits of filling within 200 feet of the landfill property boundary or beyond the landfill property boundary in excess of the lower explosive limit for such gases at any time. The migration and concentration of explosive gases in the air outside of the limits of filling within 200 feet of the landfill boundary or beyond the landfill property boundary in excess of the lower explosive limit for such gases at any time.

(f) The emission of any hazardous air contaminant exceeding the limitations for those substances contained in s. NR 445.07.

Note: Sections NR 445.04 and 445.05 were repealed effective 8-1-08.

History: Cr. January, 1988, No. 385, eff. 2-6-88; am. (1), (2) (a), (b), (3) (intro.), (a), (d), (4) (intro.), (a) (e), r. and recr. (3) (e), cr. (3) (g) to (i), Register, June, 1996, No. 486, eff. 7-1-96; am. (2) (a), Register, May, 1998, No. 509, eff. 6-1-98; CR 05-020: am. (2) (a), (b), (3) (d), (4) (b) and (f) Register January 2006 No. 601, eff. 2-1-06; correction in (4) (f) made under s. 13.92 (4) (b) 7., Stats., Register April 2017 No. 736.

NR 504.05 General design and construction criteria. **(1)** Unless otherwise specified in this chapter, the minimum design criteria in ss. NR 504.06 to 504.09 apply to all new landfills and to the expansion of existing landfills for which the plan of operation was approved after July 1, 1996, as well as to proposed design changes for all landfills which are submitted after July 1, 1996. Landfills designed in substantial conformance with these design criteria are presumed to be capable of meeting the performance standards of s. NR 504.04 (4) (d) regarding groundwater quality.

(2) If the proposed design differs from the requirements in ss. NR 504.06 to 504.09, the applicant shall provide supporting justification for any differences.

(3) The design capacity of all proposed landfills, except landfills that are exempted in s. 289.28 (2), Stats., shall be determined such that the projected operating life of the landfill is not less than 10 years nor more than 15 years. Expansions of existing landfills are not subject to the 10-year minimum design capacity requirement. Waste approved for use in construction of landfill components is not considered part of the design capacity.

History: Cr. Register, January, 1988, No. 385, eff. 2-6-88; r. and recr., Register, June, 1996, No. 486, eff. 7-1-96.

NR 504.06 Minimum design and construction criteria for landfill liners and leachate collection systems.

(1) GENERAL. (a) All major phases of landfills initially accepting municipal solid waste after July 1, 1996, shall be designed with a composite liner and a leachate collection system capable of limiting the average leachate head level on the composite liner to one foot or less during operation and after closure of the landfill, except as provided in s. NR 504.10 (1) (c). The composite liner shall consist of 2 components; the upper component shall consist of a nominal 60-mil or thicker geomembrane liner with no thickness measurements falling below the minimum industry accepted manufacturing tolerances, and the lower component shall consist of a minimum 4 foot thick layer of compacted clay meeting the specifications of s. NR 504.06 (2) (a). The geomembrane component shall be installed in direct and uniform contact with the compacted clay soil component, and the landfill shall meet or exceed the standards in the applicable portions of subs. (2), (3) and (4). All other landfills shall be designed to contain and collect leachate to the maximum practical extent. This shall be accomplished by designing the landfill to meet the standards contained in the applicable portions of subs. (2), (3) and (4), unless the department approves the applicant's alternative design as per s. NR 504.10, which provides an equivalent or better level of performance than the standards contained in this chapter.

(b) If the applicant does not complete construction of the first major phase of the landfill within 2 years from the date of the plan of operation approval, the applicant shall reapply to the department for approval to construct the landfill. This application does not constitute a feasibility report as defined in s. 289.24, Stats. The department may require additional conditions of approval and require redesign of the landfill in accordance with state-of-the-art design criteria.

(2) COMPOSITE OR CLAY LINED LANDFILLS. All landfills designed with a composite liner or a clay liner shall meet the following requirements:

(a) All clay used in liner construction shall meet the following specifications:

1. A minimum of 50% by weight which passes the 200 sieve.

2. A saturated hydraulic conductivity of 1×10^{-7} cm/sec or less, when compacted to required moisture contents and densities based on the modified Proctor method, standard Proctor method, or a line of optimums method approved by the department.

3. An average liquid limit of 25 or greater with no values less than 20.

4. An average plasticity index of 12 or greater with no values less than 10.

(b) The separation distance between the seasonal high groundwater table and the bottom of the clay component of a composite liner or a clay liner shall be at least 10 feet except for zone-of-saturation landfills.

(c) The separation distance between the top of the bedrock surface and the bottom of the clay component of a composite liner or a clay liner shall be at least 10 feet.

(d) The slope of the liner surface toward the leachate collection lines shall be at least 2%.

(e) The minimum thickness of the clay component of a composite liner at all locations shall be at least 4 feet. The minimum thickness of a clay liner at all locations shall be at least 5 feet.

(f) The clay component of a composite liner or a clay liner shall be constructed in the following manner:

1. All clay layers in the liner shall be constructed in lift heights no greater than 6 inches after compaction using footed compaction equipment having feet at least as long as the loose lift height. As needed, clay shall be disked or otherwise mechanically processed prior to compaction to break up clods and allow for moisture content adjustment. Clod size shall be no greater than 4 inches. All compaction equipment utilized shall have a minimum static weight of 30,000 pounds. Lighter equipment may be used in small areas where it is not possible to use full size equipment. Alternative procedures or equipment may be proposed for approval by the department.

2. A sufficient number of passes of the compaction equipment shall be made over each lift of clay to ensure complete remolding of the clay.

3. All clay shall be compacted to 90% modified or 95% standard Proctor density at a moisture content at least 2% wet of optimum if using the modified Proctor method and wet of optimum if using the standard Proctor method, based on the characteristics of the appropriate Proctor curve for the clay being placed. As clay placement proceeds, the minimum density and moisture content targets shall be adjusted as necessary. The department recommends use of an alternate method of determining adequate density and moisture content based on a line of optimums method. However, this method may not be used unless it has been previously detailed in a landfill's plan of operation or a proposed plan modification and approved in writing by the department. At a minimum, any such proposal shall address how the line of optimums would be defined, as well as how the minimum dry unit weight needed to ensure adequate shear strength of the clay soils proposed would be determined.

(g) The slope of the interior sidewalls of a landfill may not exceed 3 horizontal to one vertical nor be less than 5 horizontal to one vertical.

(h) The clay component of a liner in adjacent phases shall be keyed together to form a continuous clay seal. This shall be accomplished by excavating steps along the edge of the existing lined phase and overlapping them with the lifts of clay being placed for the liner of the new phase. A minimum of 4 steps shall be included, with the total width of the spliced area measuring a minimum of 15 feet.

(3) COMPOSITE-LINED LANDFILLS. All landfills designed with a composite liner shall meet the following additional requirements for the geomembrane component of the liner:

(a) All geomembranes shall be fabricated from resins specifically formulated for waste containment purposes. Nominal geomembrane thickness shall be 60 mils or greater with no thickness measurements falling below the minimum industry accepted manufacturing tolerances.

(b) Additional protection shall be provided for the geomembrane component of the composite liner along areas subject to

traffic or other concentrated activity during construction or operation. This shall include sumps, sideslope risers and entry ramps.

(c) For slopes in excess of 10%, geomembrane panels shall be installed such that all seams run perpendicular to the contour lines of the slope to the extent possible.

(d) Prior to geomembrane placement, the clay surface shall be rolled and graded so it is free of irregularities, protrusions, loose soil and abrupt changes in grade. The surface shall also be free of stones, grade stakes and construction debris which may be damaging to the geomembrane and shall contain no areas excessively softened by high water content. The clay surface shall be sufficiently dry and dense such that the construction equipment used to place the geomembrane panels do not rut the clay surface. All depressions and large cracks shall be filled in with tamped clay.

(e) Geomembrane panels made of polyethylene resins shall be welded by double-tracked, fusion welding machines for all linear seams. Corners, butt seams and long repairs shall be fusion welded where possible. Extrusion or fusion welding shall be used for all other repairs, detail work and patches. Department approval shall be obtained prior to use of any other welding method for either panel seaming, repairs or construction of details.

(f) The geomembrane component of a composite liner constructed in phases adjacent to each other shall be welded together to form a continuous membrane surface. The liner extending beyond the proposed edge of waste at a phase junction shall be protected from traffic and weather.

(g) Wrinkles in the geomembrane component which are higher than they are wide, shall be smoothed or cut out and repaired prior to covering with soil. Guidance to machine operators placing soil on the geomembrane component shall be provided by the use of an observer with an unobstructed view of the advancing lift of soil.

(h) The minimum thickness of soil which must be present over the geomembrane component before vehicular traffic may occur shall be one foot for vehicles with ground pressure less than 5 pounds per square inch and 2 feet for all other tracked vehicles and flotation tire equipped vehicles. Trucks and other wheeled hauling equipment shall be confined to corridors or locations with a soil thickness of 3 or more feet over the geomembrane component.

(i) In order to lessen desiccation effects, the base of the landfill and the lower 10 vertical feet of the sideslope shall be covered with a drainage blanket within 30 days after completing quality control and quality assurance testing of the installation. The remaining sideslope shall be covered with either drainage material or a geotextile to prevent damage to the geomembrane.

(j) To prevent movement and folding of wrinkles, placement of soil over the membrane shall be performed during cooler temperature periods to the extent possible using methods of placement which minimize wrinkling.

(k) Anchor trenches shall be designed and constructed around the perimeter of the landfill to secure the permanent edges of the geomembrane. The geomembrane shall be seamed completely to the ends of all panels to minimize the potential of tear propagation along the seam.

(4) ZONE-OF-SATURATION LANDFILLS. All landfills proposed with base grades beneath the groundwater table shall meet the following requirements:

(a) The landfill shall be located in a fine-grained soil environment.

Note: Fine-grained soil environment is defined in s. NR 500.03 (86).

(b) The landfill shall meet the requirements in sub. (2) (a), (d), (e), (f), (g) and (h), and if the landfill will accept municipal solid waste, sub. (3).

(c) An analysis shall be performed of the effect which groundwater flow may have on uplift of the liner and the short and long-term stability of the geomembrane component of the composite

liner. The analysis shall evaluate the effect of an underdrain or other dewatering system.

(d) Borings, backhoe pits or other means of exposing subsoils shall be performed on a 100-foot grid to a minimum depth of 5 feet below the gradient control layer, if part of the design, or a minimum depth of 5 feet below the subbase grades of the liner. All detected granular or silty soils within this 5 foot depth shall be removed and replaced with compacted, fine-grained soils.

(5) LEACHATE COLLECTION SYSTEMS. All leachate collection systems shall incorporate the following design features:

(a) A leachate collection system shall be included in each horizontal phase of the landfill. This system shall be designed to route leachate to the perimeter of the landfill in the most direct manner possible and limit the average leachate head level on the liner to one foot or less. The piping layout shall be such that leachate flows no more than 130 feet across the base of the liner before encountering a perforated leachate collection pipe. The department will consider greater flow distances for well designed composite landfills.

(b) The minimum slope on all leachate collection pipes at the base of the landfill shall be a constant 0.5%. The department recommends that greater pipe slopes be utilized whenever possible.

(c) The minimum diameter of all leachate collection or transfer pipes shall be 6 inches. Schedule 80 PVC pipe or an approved substitute shall be used.

(cm) Pipe fittings selected for use with PVC and HDPE pipe shall be secured to the leachate collection pipe. PVC fittings and pipe shall be solvent-welded. HDPE fittings and pipe shall be fusion welded.

(d) Leachate collection trenches for clay liners shall be designed as rectangular trenches. Leachate collection trenches for composite liners shall be designed as vee-trenches, with a minimum depth of 18 inches and with sideslopes no steeper than 3 horizontal to one vertical. The clay component of vee-trenches shall be smooth-drum rolled such that the clay in the trenches is smooth prior to placement of the membrane.

(dm) A geotextile shall be used to line the base and sidewalls of all leachate collection trenches and shall be placed directly over the geomembrane component of a composite liner or the clay component of a clay liner. The geotextile shall have a minimum weight of 12 oz/yd², and may not be overlapped over the top of the trench. The geotextile specifications, including manufacturer's data for grab and puncture strength, shall be used to demonstrate that the geotextile can resist damage due to impact and puncture when aggregate is placed over the geotextile.

(e) The bedding material utilized in backfilling the leachate collection pipe trenches shall have a uniformity coefficient of less than 4, a maximum particle diameter of 1½ inches, a maximum of 5% of the material which passes the number 4 sieve and consist of rounded to subangular gravel. A minimum depth of 4 inches of gravel shall be placed in the trenches prior to installation of the leachate pipes. The backfill shall also be placed such that a minimum of 6 inches of material exists above the top of the pipe and within the trenches. An additional 12 inches of material shall be mounded above the trench. In cases where the particle size of the drainage blanket is significantly less than the collection trench bedding, a properly designed graded soil filter or geotextile shall be utilized to minimize the migration of the drainage blanket material into the collection trenches. Limestone and dolomite may not be used in the leachate collection system unless no other suitable material is reasonably available.

(f) The sizing of sand, gravel, geotextiles and pipe openings shall be analyzed for control of piping of soil materials. The gradation of sand and gravel, the apparent opening size of geotextiles, and the pipe opening sizes shall be selected to achieve a stable and self-filtering structure under all conditions of leachate flow.

(g) All leachate collection lines shall have cleanout access points installed on both ends of each line and may not exceed

1,200 feet from the end of one cleanout to the toe of the opposite slope.

(h) Leachate lines, manholes and other engineering structures may not penetrate the liner in the vertical direction. For clay lined landfills, leachate transfer lines may penetrate the liner in the horizontal direction only. The number of liner penetrations shall be kept to a minimum. Composite lined landfills shall be designed without any perforations in the liner and in accordance with par. (j).

(i) Any leachate line that penetrates a clay liner shall have a 4 foot by 4 foot anti-seep collar placed around it. A minimum of 5 feet of compacted clay, as measured from the pipe, shall be placed around the collar in all directions.

(j) All composite lined landfills shall be designed and constructed with sumps and sideslope risers as part of their leachate removal system rather than utilizing systems which penetrate the composite liner sidewall. The leachate removal system shall meet the following requirements:

1. The volume of the sump and the capacity of the pump shall be sized so that accumulation of leachate outside the sump does not occur based on an assumed annual leachate collection rate of 6 inches. The volume of the sump shall take into account the potential buildup of solids over time.

2. The base of the leachate collection sumps shall be protected by the use of a thick polyethylene plate or other means acceptable to the department which is placed prior to the installation of the sideslope riser and backfill.

3. The leachate discharge pipes between the sideslope risers and collection tank shall be equipped with valves to prevent backflow into the waste disposal area.

4. The minimum diameter of the sideslope riser shall be 18 inches. The geometry of the sideslope riser at the junction of the sump and sidewall shall be selected to assure passage of the pump and associated hardware and to assure correct positioning of the intake of the pump.

5. The area of the sump and depth of gravel fill shall be sized to allow remedial installation of access and hardware for removal of leachate in the event of failure of the sideslope riser and pump system. The base of the sump shall be protected by polyethylene plate.

(k) All leachate lines transporting leachate out of the landfill by gravity shall be constructed with valves so the flow of leachate can be controlled. The valves shall be compatible with the leachate and be capable of being operated from the ground surface.

(L) All leachate transfer lines located outside of the composite lined or clay lined area shall be designed to assure groundwater protection through the use of double-cased pipe or by using another approved secondary containment method. All leachate transfer line piping shall be pressure tested prior to use. Unless otherwise approved by the department, the upslope end of the secondary pipe shall be sealed and the downslope end shall be open to allow any collected liquid to flow into the manhole.

(m) All leachate transfer lines, manholes, lift stations and other structures which transfer or store leachate outside the limits of waste shall be designed as shallow as practical and located far enough from the limits of filling so that excavations associated with repair of these devices would not infringe on the landfill cover system or sidewall liner. Each of these devices shall be constructed above the seasonal high groundwater table unless it is not technically feasible to do so and the design meets the requirements of par. (L).

(n) Leachate collection tanks and manholes shall be designed with a secondary containment system to prevent the discharge of leachate to ground and surface waters in the event of a leak or spill. Means shall be provided to monitor the tank and manholes within the secondary containment system unless other means for leak detection are approved by the department.

(o) All leachate collection tanks shall be designed to contain the volume of leachate which is generated by the landfill over a 4 day period and to withstand the soil and liquid loads that will be encountered during installation and use. The installation of the tanks shall follow the recommendations of the consultant and manufacturer.

(p) Measures shall be proposed to prevent accidental discharges at the leachate loadout station from entering groundwater or surface water. Unless an alternate method is approved by the department, the leachate loading station shall be paved with a concrete or asphalt pad and sloped to a catch basin to direct all spills back into the leachate holding tank.

(q) All manholes and enclosed structures for leachate and gas control systems shall be designed to allow for proper venting and access control. For landfills designed with active gas recovery systems, these devices shall be designed to minimize air intrusion into the landfill.

(r) All control systems such as pumps, valves and meters shall be designed to be operated from the ground surface.

(s) All leachate and groundwater collection systems shall be designed to accurately monitor the volume of liquid removed by the system.

(t) A minimum one foot thick granular drainage blanket shall be placed on top of the geomembrane component of a composite liner and on top of the clay component of a clay liner. For composite lined landfills, if the drainage blanket contains gravel greater than 1/4 inch, then a nonwoven geotextile shall be installed below the drainage blanket. The geotextile shall have a minimum weight of 12 oz/yd² and shall be certified to be needle-free. The granular drainage blanket shall contain no more than 5% material by weight which passes the number 200 sieve.

(tm) Leachate collection blankets shall have a minimum hydraulic conductivity of 1 cm/sec for any site that accepts any amount of municipal solid waste and 1×10^{-2} cm/sec for landfills which do not accept municipal solid waste. The gradation of the granular drainage blanket and associated hydraulic conductivity shall be selected to maintain the maximum head in the drain within the drain thickness.

(u) All major horizontal clay lined phases above the saturated zone shall be designed with a collection basin lysimeter to monitor the unsaturated zone except for composite lined landfills.

(6) ADDITIONAL REQUIREMENTS FOR LANDFILLS WITH EXTENDED COLLECTION LINES. (a) Landfills shall meet the requirements of pars. (b) to (f) where they will accept municipal solid waste and contain leachate collection lines that exceed 1,200 feet from the end of each cleanout to the toe of the opposite slope. Where the requirements of this subsection differ from other requirements of this chapter, these requirements shall take precedence.

(b) The maximum length of leachate collection lines from the access point at one end to the toe of the opposite slope may not exceed 2,000 feet.

(c) The minimum slope on all leachate collection pipes and associated pipe trenches at the base of the landfill shall be designed and constructed to be 0.5% after accounting for primary and secondary settlement of the subgrade. The minimum design slope shall be selected following computation of 100% of the primary consolidation settlement and the secondary consolidation settlement of the compressible materials beneath the facility, which includes, as applicable, in-situ soil, added geologic material, structural fill material, and compacted clay liner. Secondary settlement shall be calculated using a 100-year time frame.

(d) Pipe bedding material shall be composed of coarse, uniform gravel with a hydraulic conductivity that is greater than or equal to the hydraulic conductivity of the leachate collection blanket specified in s. NR 504.06 (5) (tm), in addition to meeting the other requirements of s. NR 504.06 (5) (e).

(e) The maximum anticipated construction, operation and post-closure overburden loads over the leachate collection piping shall be calculated and utilized in selecting the pipe material and wall thickness, based on 6-inch pipe diameter and an appropriate in-field consolidated density.

(f) All components of the leachate collection system shall incorporate all of the following design features:

1. Sweep bends at all changes of alignment, using a minimum radius of 10 pipe diameters, consisting of prefabricated PVC sweep bends or smooth pipe bends or prefabricated sweep bends for HDPE or other pipe materials.

2. Pipe alignments that minimize horizontal and vertical alignment changes for the entire leachate collection pipe length.

3. Elimination or minimization of obstructions or artifacts of construction which impose drag on pipe cleaning jetter hose or nozzles.

(7) COMPOSITE-LINED LANDFILLS USING GCLs. Use of GCLs in construction of a composite liner may not be used except in landfills which do not accept municipal solid waste, unless the GCL is used as a pad for the upper surface of the 4 foot clay component of a composite liner for a municipal solid waste landfill. The GCL and soil barrier layer components of a barrier system shall meet all of the following requirements:

(a) The hydraulic performance of the GCL shall be assessed by the use of compatibility testing. The testing protocol shall be provided to the department for review and concurrence prior to the initiation of compatibility testing. The compatibility testing shall utilize percolation fluids that simulate the leachate that will be produced by the landfill.

(b) The GCL shall meet the specifications of s. NR 504.07 (4) (a) 1. to 11.

(c) The GCL shall be underlain by a soil barrier layer that is a minimum of 2 feet thick and that meets the specifications of s. NR 504.07 (4) (a) 12. to 17.

History: Cr. Register, January, 1988, No. 385, eff. 2-6-88; r. and rec., Register, June, 1996, No. 486, eff. 7-1-96; am. (5) (e) and (f), Register, August, 1997, No. 500; CR 04-077: cr. (5) (cm), (dm), (j) 4., 5., (tm) and (6), am. (5) (d), (e), and (f) Register November 2005 No. 599, eff. 12-1-05; CR 05-020: cr. (7) Register January 2006 No. 601, eff. 2-1-06; correction made under s. 13.93 (2m) (b) 1., Stats., Register January 2006 No. 601; CR 06-026: am. (5) (dm) and (e), Register December 2006 No. 612, eff. 1-1-07.

NR 504.07 Minimum design and construction criteria for final cover systems. (1) GENERAL. (a) All final cover systems shall be designed to minimize leachate generation by limiting the amount of percolation through the cap system, reduce landfill maintenance by stabilizing the final surface through design of compatible slopes and establishment of vegetation, account for differential settlement and other stresses on the capping layer, minimize the climatic effects of freeze-thaw and desiccation on the clay capping layer of the final cover system, and provide removal of leachate and venting of gas from those landfills which accept wastes with a high moisture content or which readily biodegrade.

(b) All new landfills and expansions of existing landfills shall be designed with a final cover system meeting the requirements in subs. (2) to (9) unless it is established to the satisfaction of the department that portions of the final cover system are not needed based on the proposed waste types and the proposed design. The geomembrane component in sub. (5) does not apply to landfills designed exclusively for the disposal of high volume industrial waste, or to other landfills which are not designed to accept municipal solid waste unless the landfill is composite lined.

(c) Any phases of an existing landfill which have been designed and constructed with a composite liner shall be designed and constructed with a final cover system meeting the requirements in subs. (2) to (9), except that the requirement for the geomembrane layer in sub. (5) does not apply to composite lined

phases of existing landfills which have completed final cover placement by July 1, 1996.

(d) Landfills which accept papermill sludges or other industrial solid wastes with high water contents and low strength may propose alternate final cover systems if the strength of the waste mass will not allow for the construction of the cover system required in this section.

(2) GRADING LAYER. A minimum 6 inch thick grading layer shall be designed over the final waste elevation of landfills proposing to accept municipal solid waste to attain the required slope and provide for a stable base for subsequent system components. Daily and intermediate cover may be used for this purpose.

(3) SUPPORT LAYER FOR LOW-STRENGTH WASTES. A support layer shall be designed for stabilization, reinforcement and removal of leachate and gas over the final waste elevations for landfills which accept industrial solid wastes with high water contents and low strength.

(4) CLAY CAPPING LAYER. A minimum 2 foot thick clay cap shall be designed to provide a low hydraulic conductivity barrier to percolation. Clay used for this layer shall meet the specifications in s. NR 504.06 (2) (a). The clay capping layer shall be constructed according to s. NR 504.06 (2) (f). Final cover systems that are required to include a geomembrane layer may be designed with the following alternatives to the clay component of the composite capping layer:

(a) The clay component of the capping layer may be replaced by a GCL overlying a minimum of 2 feet of soil barrier layer. This GCL layer and the soil barrier layer shall meet the following material and construction specifications:

1. The GCL shall consist of a layer of sodium bentonite clay encapsulated between 2 geotextiles.

2. The GCL shall be covered with a geomembrane the same day that it is unpacked and placed in position. The GCL may not be installed in standing water or during rain. The GCL shall be dry when installed and covered. A GCL exhibiting unconfined swelling shall be removed and replaced.

3. The GCL shall be installed in a relaxed condition and shall be free of tension or stress upon completion of the installation. The GCL may not be stretched to fit.

4. Adjoining panels of a GCL shall be laid with a minimum of 6 inches of overlap on the longitudinal seams and a minimum 20 inches of overlap on the panel end seams.

5. Irregular shapes, cuts or tears in the installed GCL shall be covered with a GCL patch that provides a minimum 12 inch overlap onto adjacent GCL surfaces.

6. A seal of loose bentonite granules shall be placed in seam overlaps at a minimum rate of one quarter pound per linear foot of seam for all panel end seams and longitudinal seams. The seal of loose bentonite may be deleted, with concurrence by the department, for longitudinal seams where the manufacturer has processed the overlap area to enhance sealing. The seal may not be deleted for any longitudinal seams that are transitions between construction phases.

7. Loose bentonite or bentonite amended soil shall be placed at all patches and penetrations.

8. GCL panels shall be certified needle-free through magnetic and metal detection tests.

9. The GCL shall be placed in direct contact with a soil barrier layer.

10. Vehicle traffic on the subgrade of the GCL and on the GCL shall be restricted to the minimum weight and number of machines needed to deploy the GCL and geomembrane. Vehicles shall be operated to minimize the formation of ruts and surface deformations and to prevent damage to the GCL and geomembrane. Deployment methods shall be selected to prevent any tearing or combing out of fibers of the GCL.

11. Soil cover placement over the geosynthetics shall be completed in the same construction season as the geosynthetic construction.

12. The soil barrier layer shall consist of fine-grained soil or a well graded sandy soil with fines, meeting the USCS soil types ML, CL, CH, SM, or SC or dual-symbol classifications of these soils, with at least 25% by weight passing the P200 sieve size. The upper one foot shall have a maximum particle size of 2 inches or less. The lower one foot shall have a maximum particle size of 4 inches or less.

13. The soil barrier layer shall be compacted in lift heights of no greater than 12 inches after compaction using footed compaction equipment with feet at least 6 inches long. Each lift shall be disked or otherwise mechanically processed prior to compaction to break up clods and allow for moisture content adjustment. Clod size shall be no greater than 4 inches.

14. A sufficient number of passes of the compaction equipment shall be made over each lift to ensure complete remolding of the soil. All compaction equipment utilized shall have a minimum static weight of 30,000 pounds. Compaction equipment with static weight that exceeds 15,000 pounds may be utilized where it utilizes vibration to achieve dynamic compaction that exceeds 30,000 pounds of compaction energy. Lighter equipment may be used in small areas where it is not possible to use full size equipment. Alternative procedures or equipment may be proposed for approval by the department.

15. All soil shall be compacted to 90% modified or 95% standard Proctor density or greater at a moisture content at or wet of optimum. As soil placement proceeds, the minimum density and moisture content targets shall be adjusted as necessary.

16. Each lift shall be keyed into clay or soil barrier layer soils in adjacent phases to form a continuous seal. This shall be accomplished by excavating steps with a minimum width of 2 feet along the edge of the existing phase and overlapping them with lifts being placed for the new phase. A minimum of 2 steps shall be included.

17. The surface of the top lift shall be graded or compacted to be smooth and firm and shall be inspected for removal of coarse gravel, cobbles and debris prior to placement of a GCL.

(b) For industrial solid waste landfills that predominantly accept compressible wastes or wastes with high water contents and low strength, the clay layer may be replaced by a GCL overlying a minimum of a one foot sand layer. The gradation of the sand layer shall be a uniform sand selected to vent gas, drain leachate and provide hydration water to the GCL.

(c) For industrial solid waste landfills that predominantly accept ash, the clay layer may be replaced by a GCL overlying a minimum of 2 feet of soil barrier layer. The soil barrier layer shall meet the requirements of par. (a) 13. to 17. The upper foot of soil barrier layer shall also meet the requirements of par. (a) 12. The lower foot shall be designed to provide a capillary break between the ash and the upper one foot of soil barrier layer.

(d) The lower one foot of the clay layer may be replaced with a minimum of one foot of foundry green sand system sand with a bentonite content of greater than 6%, a liquid limit of greater than 20, a plasticity index of greater than 6, and a hydraulic conductivity of less than 1×10^{-7} cm/sec. The green sand system sand shall be compacted to 90% modified or 95% standard Proctor density or greater at a moisture content at or wet of optimum.

(5) GEOMEMBRANE LAYER. A geomembrane layer shall be designed to provide a low hydraulic conductivity barrier to percolation. The design and construction of the geomembrane component of the final cover system shall meet the requirements of s. NR 504.06 (3) (c) to (j) and the following:

(a) The nominal geomembrane thickness shall be 40 mils or greater, with no thickness measurements falling below industry accepted manufacturing tolerances.

(b) The geomembrane shall be installed in direct contact with the clay capping layer.

(c) Penetrations of the geomembrane, such as gas extraction wells, shall be fitted with prefabricated collars of pipe and membrane or plate and welded at the same angles which the penetrations make with the final cover slope. Methods of fixing membrane boots to vertical pipes extending above the geomembrane shall allow for differential settlement of the waste with respect to the piping without damage to the membrane seal.

(6) DRAINAGE AND ROOTING ZONE LAYER. A minimum 2.5 foot thick drainage and rooting zone layer shall be designed above the geomembrane layer or clay capping layer. This layer shall include a rooting zone to provide additional rooting depth for vegetation and to protect the geomembrane layer or the clay capping layer from freeze-thaw damage and other environmental effects. It shall also include a drainage layer to allow for the drainage of liquid infiltrating through the cap. Soils available on or near the proposed landfill property may be proposed for the rooting zone portion of this layer. This layer may not be densely compacted.

(a) For all landfills, a drainage layer shall be designed immediately above the capping layer. The drainage layer shall consist of a minimum of one foot of sand with a minimum hydraulic conductivity of 1×10^{-3} cm/sec or a geosynthetic drain layer of equivalent or greater flow capacity. The design shall include an analysis which demonstrates whether the maximum head in the drain layer will be confined within the thickness of the drain. Drain calculations shall include infiltration rates based on saturated characteristics of the topsoil and rooting zone and a hydraulic gradient of one through the topsoil and rooting zone.

(b) A perimeter drain pipe shall be placed at the low end of all final cover sideslopes. The drain pipe shall be surrounded by a minimum of 6 inches of gravel or sand with a minimum hydraulic conductivity of 1×10^{-2} cm/sec. The drain pipe shall be sloped to a series of outlets at spacings no further than every 200 feet. Modeling may be submitted to the department which supports the proposal of a different spacing.

(7) TOPSOIL. A minimum of 6 inches of topsoil shall be designed over the cover layer to support the proposed vegetation. Fertilizer and lime shall be added in accordance with section 630, Wisconsin department of transportation standard specifications for road and bridge construction or other appropriate specifications in order to establish a thick vegetative growth.

(8) REVEGETATION. The seed type and amount of fertilizer applied shall be proposed depending on the type and quality of topsoil and compatibility with both native vegetation and the final use. Unless otherwise approved by the department in writing, seed mixtures and sowing rates shall be those specified for right-of-ways according to section 630, 2003 edition of the Wisconsin department of transportation standard specifications for highway and structure construction and the 2004 supplemental specifications. Application rates for fertilizer and mulch shall also be specified.

Note: The 2003 edition of the Wisconsin department of transportation standard specifications for highway and structure construction and any annual supplemental specifications are available at <http://www.dot.wisconsin.gov/business/engrserv/procedures.htm> or can be obtained from the department of natural resources, bureau of waste management, 101 S. Webster Street, P.O. Box 7921, Madison, WI 53707-7921, (608) 266-2111, waste.management@dnr.state.wi.us. Copies are also available for inspection at the offices of the legislative reference bureau and the secretary of state.

(9) FINAL USE. The proposed final use shall be compatible with the final cover system. The following activities are prohibited at solid waste disposal landfills which are no longer in operation unless specifically approved by the department in writing.

(a) Use of the waste disposal area for agricultural purposes.

(b) Establishment or construction of any buildings over the waste disposal area.

(c) Excavation of the final cover or any waste materials.

History: Cr. Register, January, 1988, No. 385, eff. 2-6-88; am. (1) (a), (b), (2), cr. (1) (c), (d), (5), (6) (a), (b), r. and recr. (3), (4), r. (5) (a) to (c), renun. (5) to (8)

to be (6) to (9) and am. (6) (intro.), (7), (9) (intro.), (a), (b), Register, June, 1996, No. 486, eff. 7-1-96; CR 04-077: am. (6) (a) Register November 2005 No. 599, eff. 12-1-05; CR 05-020: r. and recr. (4), am. (8) Register January 2006 No. 601, eff. 2-1-06.

NR 504.075 Soil borrow sources. (1) GENERAL. This section applies to all soil borrow sources developed for the purpose of constructing, operating or closing landfills. Written approval from the department shall be obtained prior to initiating soil borrow activities at any borrow source subject to these requirements.

(2) EXEMPTIONS. (a) The following activities are exempt from the requirements of this section:

1. Production of processed aggregate products.

2. Excavation of soils from construction projects off of the landfill property, provided the soils will be used for purposes other than a compacted clay liner or capping layer, soil barrier layer, leachate collection layer or final cover drain layer.

(b) Soil borrow sources which are exclusively within the proposed or approved limits of filling for a landfill or areas where soils are obtained from excavation projects developed primarily for purposes other than construction, operation or closure of a landfill are not subject to the requirements of subs. (3) and (4) (b).

(3) INITIAL SITE INSPECTION. An initial site inspection shall be conducted in accordance with s. NR 509.04 for each proposed soil borrow source.

(4) LOCATIONAL INFORMATION. (a) Submittals for soil borrow sources shall include a description of total acreage, ownership, location by quarter - quarter section and by parcel corner using a coordinate system and datum acceptable to the department, present land uses, transportation routes, any access restrictions and travel distance to and from the landfill.

(b) Submittals for soil borrow sources shall include site-specific surface water drainage patterns and significant hydrologic features such as surface waters, springs, drainage divides and wetlands; areas of special natural resource interest; and historical or archaeological areas within and adjacent to the proposed limits of excavation.

(5) FIELD AND LABORATORY INVESTIGATIONS FOR CLAY BORROW SOURCES AND SOIL BARRIER LAYER SOURCES. Submittals for soil borrow sources shall include field and laboratory investigations to define the physical characteristics of any clay borrow source or soil barrier layer source designated to be used for a liner or final cover for the landfill. An alternative geotechnical investigation program may be used if it is approved by the department in writing prior to performing the field and laboratory investigations. An alternative geotechnical investigation program may be submitted in cases where previous information exists regarding the proposed soil borrow source. Submittals for soil borrow sources shall include justification for any reduction in sampling or testing frequency required by this section or by an approved alternative geotechnical investigation.

(a) A minimum of 10 test pits or borings for the first 5 or less acres and one test pit or boring for each additional 3 or less acres shall be excavated or drilled on a uniform grid pattern across each proposed borrow source to document the depth, lateral extent and uniformity of the clay or soil barrier layer. The department recommends using test pits as the method of borrow source investigation. Logs identifying the geologic origin, testing results, USCS classification and a visual description of each major soil unit encountered shall be included with the submittals for soil borrow sources.

(b) A minimum of 2 representative samples from each test pit or boring shall be analyzed by a soils laboratory for Atterberg limits and grain size distribution to the 0.002 millimeter particle size using mechanical and hydrometer methods. Each sample shall be classified according to the USCS.

(c) A minimum of one representative sample from each major soil unit shall be tested for the relationship of water content to dry

density using either the modified or standard Proctor method. For uniform clay deposits or uniform soil barrier layer source deposits, no fewer than 3 samples shall be tested. Each Proctor curve shall be developed with a minimum of 5 points. If the line of optimums method is anticipated to be used in construction, both the standard and modified Proctor curves shall be developed for each representative sample.

(d) A minimum of one laboratory hydraulic conductivity test shall be conducted on each sample used to develop the Proctor curves. The samples tested shall be at or above the optimum moisture content. This requirement does not apply if the soil borrow source is contiguous with a previously approved borrow source for clay or soil barrier layer soils and all field observations and laboratory test results support an interpretation that the soil borrow source occupies the same soil horizon and has the same genesis as the previously approved borrow source. Support for such a conclusion shall be provided in the submittals for soil borrow sources.

(6) STOCKPILING. Stockpiling of soils obtained from clay borrow sources and soil barrier layer sources for landfill liner or final cover construction shall be conducted in an organized manner that minimizes mixing of dissimilar soil types. Soils shall be segregated into stockpiles based on similar USCS soil type, soil gradation, Atterberg limits and compaction specifications. Soils from differing sources may not be commingled unless soil properties are similar.

(7) DATA PRESENTATION FOR ALL CLAY BORROW SOURCES AND SOIL BARRIER LAYER SOURCES. Submittals for soil borrow sources for clay and soil barrier layers shall include all of the following:

- (a) The calculated volume of soil needed and the volume of acceptable soil available.
- (b) Property boundaries and any test pit or boring locations, shown on a topographic map with a scale of 1 inch = 500 feet and provided in a digital format acceptable to the department. The mapped area shall extend a minimum of 500 feet beyond the proposed borrow source.
- (c) An isopach map showing the thickness of acceptable soil.
- (d) A description of the methods to be used for separating the acceptable soil from any unacceptable soil.
- (e) A proposal for maintaining drainage and sedimentation control.
- (f) All data obtained from the testing program.

(8) DATA PRESENTATION FOR OTHER BORROW SOURCES. Submittals for soil borrow sources other than those used for clay and soil barrier layers shall include all of the following:

- (a) Property boundaries shown on a topographic map with a scale of 1 inch = 500 feet and provided in a digital format acceptable to the department. The mapped area shall extend a minimum of 500 feet beyond the proposed borrow source.
- (b) A proposal for maintaining drainage and sedimentation control.

(9) STORMWATER MANAGEMENT. Submittals for soil borrow sources shall include a stormwater management plan that complies with the requirements of s. NR 504.09 (1) (a) to (f) and (h) to (j), unless the borrow source is subject to other permits with equivalent authority and requirements, such as a stormwater discharge permit or non-metallic mining reclamation permit.

(10) RECLAMATION OF BORROW SITES. Submittals for soil borrow sources shall include a reclamation plan detailing the actions to be taken to achieve successful reclamation of the borrow source.

(a) Reclamation plans for borrow sources on the property where the landfill is located shall specify a post-mining land use that is integrated with the existing and proposed drainage, surface water discharge requirements, grades and final use of the landfill. The reclamation plan shall be prepared consistent with the applicable standards in ss. NR 135.06 to 135.12.

(b) Soil borrow areas that are not on the landfill property are subject to the provisions of ch. NR 135 and, if required, shall submit a reclamation plan and obtain a nonmetallic mining reclamation permit from the appropriate regulatory authority.

(11) OTHER REQUIREMENTS. (a) Clay borrow sources and soil barrier layer sources proposed for a liner or final cover that have less than a 5 foot but greater than 2 foot uniform thickness may be approved if the applicant demonstrates an excavation methodology and a documentation procedure to ensure that all soil used meets soil index properties required by this chapter.

(b) Submittals for soil borrow sources shall include a description of any necessary measures to be taken to comply with wetlands protection requirements, runoff and sediment controls and surface water discharge permit requirements and to minimize effects on areas of special natural resource interest and historical or archaeological areas within and adjacent to the proposed limits of excavation.

Note: It may be necessary to obtain federal, state or local permits prior to excavating soil from a borrow source near surface waters or wetlands. For example, s. 30.19 (1g) (c), Stats., requires a permit for grading or removing top soil from the bank of any navigable stream, lake or body of navigable water where the area exposed by such grading or removal will exceed 10,000 square feet. It is the responsibility of the applicant or property owner to obtain any federal, state or local permits that are required and to provide reference to those other permit applications in the submittals for soil borrow sources.

History: CR 05-020: cr. Register January 2006 No. 601, eff. 2-1-06.

NR 504.08 Minimum design and construction criteria for landfill gas extraction systems. **(1) GENERAL.** All landfills accepting wastes with the potential to generate gas shall be designed to prevent the migration of explosive gases generated by the waste fill.

(2) ACTIVE GAS EXTRACTION AND TREATMENT. In order to efficiently collect and combust hazardous air contaminants, all landfills which accept municipal solid waste shall be designed with an active gas recovery system. All gas recovery systems shall include the following design features, unless otherwise approved by the department:

(a) Vertical gas extraction wells shall be proposed throughout the entire landfill with a maximum radius of influence of 150 feet per well and lesser radii proposed for wells located near the perimeter of the landfill. The radii of influence of adjacent wells shall overlap. Alternate well spacings may be proposed if site specific data is obtained through performance of pump tests.

(b) All vertical gas extraction wells shall extend to 10 feet above the leachate collection system and shall be placed in 36 inch diameter boreholes. An exemption may be proposed to allow for placement of gas extraction wells closer to the leachate collection system.

(c) The pipe in the borehole shall be a minimum 6 inch diameter, Schedule 80 polyvinylchloride or an approved alternate.

(d) The lower 2/3 to 3/4 of the pipe in the borehole shall be slotted or perforated pipe.

(e) The backfill around the slotted or perforated pipe in the borehole shall be one to one and 1/2 inch washed stone. The top 10 feet of the borehole shall be sealed.

(f) Each gas extraction well shall have a flow control valve and sampling access port.

(g) The gas header system shall be looped to allow alternative flow paths for the gas.

(h) The minimum slope on the header pipe shall be 2% for pipes over the waste mass.

(i) Polyethylene pipe shall be used for header and lateral pipes.

(j) The sizing of the blower, header and laterals shall ensure that a minimum vacuum of 10 inches water column is available in the header adjacent to those wells located furthest from the blower.

(k) A drip leg or equivalent shall be installed immediately before the blower to separate condensate from gas while preserv-

ing the suction at the wells while under maximum operating vacuum.

(L) All condensate transfer piping and gas transfer piping located outside of the limits of waste shall be designed to be fully encased in at least 2 feet of clay, double-cased pipe or by using another approved secondary containment method except for systems with multiple drip legs within the landfill where the bulk of the condensate has been removed.

(m) The system shall be designed to have the ability to collect and treat all condensate, measure volumes and collect samples.

(n) A flare shall be designed to meet the requirements of ch. NR 445.

(3) GAS MONITORING WELLS. A minimum of one gas monitoring well shall be located on each side of the landfill. The wells shall be constructed according to s. NR 507.11.

(4) PASSIVE GAS EXTRACTION SYSTEMS. Landfills which accept only industrial waste or other nonmunicipal solid waste with the potential to generate gas and which do not utilize an active gas extraction system shall be designed with a system which allows gas venting from the entire landfill surface. An analysis shall be performed to determine the spacing needed between gas venting trenches for an effective system and also to ensure that ch. NR 445 limits for hazardous air contaminants will not be exceeded. The system shall be designed with a continuous layer below the capping layer which allows surficial venting from the waste final surface. This layer may be part of the support layer required in s. NR 504.07 (3). This layer shall consist of a minimum of one foot of granular soil with a minimum hydraulic conductivity of 1×10^{-3} cm/sec and a series of flexible, perforated pipes connected to a series of outlets.

History: Cr. Register, May, 1992, No. 437, eff. 6-1-92, r. and recr., Register, June, 1996, No. 486, eff. 7-1-96; CR 05-020: r. (2) (e) Register January 2006 No. 601, eff. 2-1-06.

NR 504.09 Storm water management and miscellaneous design and construction criteria for landfills.

(1) STORM WATER MANAGEMENT. (a) Storm water drainage ditches, structures and sedimentation basins shall be designed such that the construction of these items shall occur during the initial stage of construction to control rainfall runoff and limit entrained sediment from reaching surface water bodies.

(b) All landfills shall incorporate the following concepts in the design of both temporary and permanent erosion and sediment control measures:

1. Grading and construction shall be scheduled to minimize soil exposure.
2. Existing vegetation shall be retained whenever feasible.
3. Disturbed areas shall be vegetated and mulched.
4. Runoff shall be diverted away from disturbed areas and active fill areas.
5. Runoff velocities shall be minimized.
6. Drainageways and outlets shall be prepared to handle concentrated or increased runoff.
7. Sediment shall be trapped on site.
8. Runoff control structures shall be inspected and maintained.

(c) The design calculations required in pars. (d), (e) and (f) shall each be performed for the period in the landfill's development where the combination of surface conditions and contributing acreage would result in the greatest runoff volume.

(d) All temporary and permanent storm water drainage ditches, swales, conveyance channels, channel linings, outlet protection, culverts and other storm water control structures handling flow onto or off the landfill shall be designed to accommodate peak flow rates from a 25 year, time of concentration storm event.

(e) Temporary and permanent sediment control measures shall be designed to settle 0.015 mm size particles for all storms up to and including the 25 year, 6-hour storm. The surface area for sediment basins shall be calculated using the rainfall intensity over the 25 year, 6-hour storm event for the landfill. Principal spillways, and outlet protection for sediment basins shall be designed to pass a 25 year, time of concentration storm event. Emergency spillways for sedimentation basins shall be designed to pass a 100 year, time of concentration storm event. The design of the dewatering structures for sediment basins shall be selected such that the basin is dewatered in no less than 3 days. An analysis shall be performed to document compliance with this requirement.

(f) Storm water shall be diverted away from the active fill area of the landfill and any borrow areas to a sedimentation control structure.

(g) Containment berms placed around active fill areas shall be designed to control and collect the liquid volume resulting from the 25 year, 24-hour storm event. The design shall consider the volume of liquid generated from active fill areas which shall include areas with exposed solid waste or areas with waste covered by daily cover. Storm water in contact with active fill areas shall be handled and treated as leachate in accordance with ch. NR 506.

(h) Storm water drainage ditches, structures and sedimentation basins shall discharge along existing drainage patterns capable of accepting the anticipated flow volume. An analysis shall be performed to determine the amount and velocity of runoff prior to landfill development and to document compliance with this requirement.

(i) Storm water diversion and construction at a landfill shall be designed to minimize impacts on adjacent property, such as erosion, sedimentation and flooding.

(j) Design of all storm water management features shall comply with other applicable requirements of the department. Such requirements include, but are not limited to, ch. NR 103, and permits required by ch. 30, Stats.

(2) MISCELLANEOUS. All landfills shall be designed to meet the following requirements:

(a) A method of controlling any dust or windblown debris shall be included in the landfill design. The factors which will be considered by the department when evaluating alternative provisions for controlling dust and windblown debris includes the remoteness of the landfill, natural screening, windbreaks and waste types.

(b) Access to the landfill shall be restricted through the use of fencing, natural barriers or other methods approved in writing by the department.

(c) All access roads for the landfill, including those leading to the active area, shall be designed for all weather operation.

(d) All access roads which are used by over the highway vehicles shall be designed with a maximum grade no greater than 10%. The intersection of the landfill access road with an existing highway shall be designed to provide sufficient sight distance and minimum interference with traffic on the highway.

(f) A minimum separation distance of 100 feet shall be maintained between the limits of filling and adjacent property line. A minimum distance of 50 feet shall be maintained between any permanent berms or excavations associated with the landfill, excluding storm water diversion structures and the adjacent property line.

(g) The landfill shall be designed so that final grades in each phase are reached as soon as possible, and the open area used for refuse filling is minimized.

(h) The final slopes of all landfills shall be equal to or greater than 5%, but may not exceed 4 horizontal to one vertical. Landfills primarily designed for the acceptance of papermill or waste-

water treatment plant sludge shall have final slopes no greater than 6 horizontal to one vertical.

(i) A minimum of 2 leachate head wells shall be proposed for each major horizontal phase of the landfill unless otherwise approved by the department.

(j) All landfills which accept municipal solid waste shall be supplied with a weight scale.

(k) All landfills shall be designed with properly protected permanent benchmarks for horizontal and vertical control. Elevations shall be tied to USGS datum and horizontal control shall be referenced to the property boundary.

History: Cr. Register, June, 1996, No. 486, eff. 7-1-96; am. (1) (e), Register, September, 1998, No. 513, eff. 10-1-98; CR 05-020: r. (2) (e) Register January 2006 No. 601, eff. 2-1-06.

NR 504.095 Design criteria for landfills that recirculate leachate. (1) GENERAL. Leachate recirculation systems shall be designed to meet the following requirements:

(a) Leachate recirculation shall be limited to municipal solid waste landfills that are designed with a composite liner and leachate collection system meeting the minimum requirements of s. NR 504.06.

(b) Leachate recirculation shall be limited to areas of the landfill where the leachate collection drainage blanket has a hydraulic conductivity of 1 cm/sec or greater. The department may approve leachate recirculation in existing cells with lower permeability leachate collection blankets, provided that the operator can demonstrate that the maximum leachate head on the liner can be maintained at less than 12 inches and that the recorded leachate head has not exceeded 12 inches in the past.

(c) Leachate shall be recirculated only in areas of the landfill which are connected to the active gas extraction systems and are capable of collecting the additional gas expected to be generated. Active gas extraction shall commence in those areas no later than the initiation of leachate recirculation.

(d) Leachate recirculation distribution systems may not discharge leachate within 100 lateral feet of the exterior sideslope final grades unless otherwise approved by the department in writing.

(e) A minimum depth of 20 feet of waste shall be maintained between the landfill base and lowest point of leachate distribution.

(f) Operating controls and instructions for leachate recirculation distribution systems shall be prepared to apply to operations expected to be encountered in all weather and seasons. Instructions shall include cessation of leachate recirculation upon discovery of seeps and other surface expressions of recirculated leachate, excessive pressures within the waste mass, saturated conditions in the waste mass, inadequate shear strength of the waste mass or other conditions indicative of instability.

(2) SURFACE APPLICATION. In addition to the general requirements, surface application systems for leachate recirculation shall meet the following requirements:

(a) The leachate distribution system shall be designed so that leachate is not introduced into the waste in a manner that causes ponding or surface runoff of leachate. Open surface trenches or ponds shall not be utilized.

(b) The leachate distribution system shall be designed to minimize evaporation of the leachate and volatilization of compounds in leachate. The leachate distribution system shall be designed to distribute the leachate in a manner that results in its absorption into the waste mass after application. Spray irrigation systems that are designed to promote evaporation may not be utilized.

(3) VERTICAL DISTRIBUTION SYSTEMS. Vertical distribution systems for leachate recirculation shall meet the following requirements:

(a) Wells designed solely for the gas extraction system shall not be used for leachate recirculation.

(b) Vertical distribution systems shall utilize vertical wells placed into the waste mass. Distribution well design need not comply with the requirements of s. NR 504.08 (1) or ch. NR 141 or 812. Well spacing shall be determined based on leachate flow rates, pumping characteristics, permeability of the waste mass, and ability of the waste to accept liquid without being pressurized.

(c) Leachate distribution wells shall be designed with a surface seal to control odors and landfill gas.

(d) Pumping pressures and pumping intervals for distribution wells shall be designed to prevent surface emergence of leachate. Pumping pressures and hydrostatic pressures shall be limited to prevent excessive pressures to prevent separation of waste layers or short-circuiting of leachate to the leachate collection system.

(e) The leachate distribution system shall be designed to achieve a uniform distribution of leachate throughout the zone of influence of the wells.

(f) Leachate distribution wells may be designed to also extract landfill gas.

(4) HORIZONTAL DISTRIBUTION SYSTEMS. Horizontal distribution systems shall meet the following requirements:

(a) The leachate distribution piping shall be designed to distribute the leachate consistently along its length.

(b) Distribution systems shall be designed with a permeable bedding material that is capable of rapidly dissipating recirculated leachate into the waste mass.

(c) Distributions systems shall be designed with bedding material which is capable of maintaining its structure and characteristics during the expected operational life of the system.

(d) Distribution systems shall be designed to operate with specific distribution periods with landfill gas extracted in the interval between those distribution periods, unless otherwise approved by the department in writing. The length of the leachate distribution periods and the intervals of gas extraction shall be determined in a manner that minimizes uncontrolled landfill gas emissions.

(e) Pumping pressures and pumping intervals shall be designed to prevent surface emergence of leachate. Pumping pressures shall be limited to prevent excessive pressures to prevent separation of waste layers or seeps or other leachate discharges.

History: CR 04-077: cr. Register November 2005 No. 599, eff. 12-1-05; CR 06-026: am. (1) (d) and (2) (b), Register December 2006 No. 612, eff. 1-1-07.

NR 504.10 Alternative design criteria for landfills accepting high volume industrial wastes. This section applies to landfills designed principally for high volume industrial waste, wood residue and minor amounts of other wastes as approved by the department. This section applies to all new landfills and to the expansion of existing landfills for which the plan of operation was approved after February 1, 1988.

(1) GENERAL. (a) An applicant may design a high volume industrial waste landfill to meet the standards contained in ss. NR 504.05 to 504.09 or may propose an alternative design in accordance with the provisions of this section.

(b) If the applicant does not complete construction of the first major phase of the landfill within 2 years from the date of the plan of operation approval, the applicant shall reapply to the department for approval to construct the landfill. This application does not constitute a feasibility report as defined in s. 289.24, Stats. The department may require additional conditions of approval and require redesign of the landfill in accordance with state-of-the-art design criteria.

(c) An owner or operator of a landfill which is designed primarily for disposal of high volume industrial waste may accept up to 10% by weight of municipal waste such as packaging which is generated in conjunction with the manufacturing process, and not be subject to the design requirements of s. NR 504.05 (1). Household and plant waste not generated as a direct result of the manufacturing process such as office and cafeteria waste, may not be

disposed of in a landfill which does not meet the requirements of s. NR 504.05 (1).

(2) DESIGN CAPACITY. Design capacity shall be in accordance with s. NR 504.05 (3).

(3) DESIGN CRITERIA. An applicant seeking approval of an alternative design under this section shall demonstrate in the feasibility report required in ch. NR 512 that the alternative design adequately protects public health, welfare and the environment and meets or exceeds the location and performance standards of s. NR 504.04. The applicant may include the following types of information as a part of such a demonstration:

(a) Landfill characteristics including regional and specific information on land use, geology, hydrology, hydrogeology and soils.

(b) Waste characteristics including quantity and physical and chemical analyses of the waste and its leachate.

(c) An analysis of any design to control geologic or hydrogeologic conditions of the site.

(d) Field demonstration data.

(e) Design and performance data for other similarly designed and constructed landfills.

(f) Accepted scientific or engineering analyses or field studies, field plots, research, manufacturer's data or demonstrations.

(4) APPROVAL CRITERIA. The department shall approve the alternative design proposed by the applicant if the department determines to a reasonable degree of certainty that the alternative design adequately protects public health, welfare and the environment and meets or exceeds the location and performance standards of s. NR 504.04.

History: Cr. Register, June, 1996, No. 486, eff. 7-1-96.

NR 504.11 Minimum design and construction criteria for landfills accepting residue produced by burning municipal solid waste. (1) APPLICABILITY. This section applies to landfills designed for residue produced by the burning of municipal solid waste as approved by the department. This section applies to all new and existing landfills.

(2) LANDFILL DESIGN CRITERIA FOR RESIDUE PRODUCED BY BURNING MUNICIPAL SOLID WASTE. (a) All landfills that accept municipal solid waste combustor residue that tests below the limits specified in s. NR 502.13 (6) (g) shall be designed as composite lined monofill cells according to the following criteria:

1. The composite liner shall consist of a minimum 60 mil geomembrane overlying a minimum thickness of 4 feet of compacted clay meeting the specifications of s. NR 504.06.

2. The leachate collection system shall be designed such that the leachate from the residue monofill cell can be sampled and collected separately from non-residue disposal areas.

3. The department may approve alternate designs such as double liners if it finds that the design provides equivalent protection.

(b) All landfills that accept municipal solid waste combustor residue that exceeds the limits specified in s. NR 502.13 (6) (g) shall be designed as a double composite lined monofill cell according to the following criteria. The department may approve alternate designs if it finds that the design provides equivalent protection.

1. The double composite liner shall be designed with 2 separate composite liners with each liner consisting of a minimum 60 mil geomembrane overlying a minimum thickness of 4 feet of compacted clay meeting the specifications of s. NR 504.06.

2. The composite liners shall be separated by a leachate detection layer consisting of a minimum one foot layer of granular material.

3. Separate leachate collection systems shall be designed above and between the composite liners. The leachate collection system shall be designed such that the leachate from the leachate detection layer can be sampled and collected separately from the upper leachate collection system and from the non-residue disposal areas.

(c) All landfills which accept municipal solid waste combustor residue shall be approved by the department in accordance with s. NR 514.07 (5) prior to accepting each specific residue waste stream.

History: Cr. Register, June, 1996, No. 486, eff. 7-1-96.

or the water will be sent to the distribution system following the inspection, all of the following requirements apply:

1. A minimum 0.5 mg/l chlorine residual shall be maintained in the tank throughout the inspection.
2. All equipment shall be dedicated for potable water use and is disinfected with a 200 ppm chlorine solution.
3. For all concrete ground reservoirs with cracks or signs of leakage, the top shall be soaked with water and the interior shall be checked for leaks.
4. A minimum of 2 bacteriologically safe samples shall be obtained from the tank after the inspection, one following the inspection and one 24 hours later.
5. A minimum pressure of 35 psi shall be maintained throughout the distribution system during the inspection.

(c) *Diver inspections.* Diver inspections shall involve the use of a commercial diver tethered to, and in communication with, the outside. Procedures shall be done in accordance with Section 4.4 of AWWA Standard C652-02 and Section 12.0 of the Consensus Standards for Commercial Diving and Underwater Inspection. The department recommends that the tank be removed from service during the inspection. If the tank is to remain in service during the inspection or if the water will be sent to the distribution system following the inspection, all of the following requirements apply:

1. A minimum 0.5 mg/l chlorine residual shall be maintained in the tank throughout the inspection.
2. All equipment shall be dedicated for potable water use and shall be disinfected with a 200 ppm chlorine solution. The inspector shall also be disinfected.
3. The inspection of the tank shall be done after the sediment is removed from the bottom of tank and shall include a visual inspection of any expansion joints.
4. For all concrete ground reservoirs with cracks or signs of leakage, the top shall be soaked with water and the interior shall be checked for leaks.
5. A minimum of 2 bacteriologically safe samples shall be obtained from the tank after the inspection, one following the inspection and one 24 hours later.

(d) *Robotic inspections.* Robotic inspections shall involve a rover unit with a fiber optic tether and video camera and shall include cleaning capabilities. If the tank is to remain in service during the inspection or if the water will be sent to the distribution system following the inspection, all of the following requirements apply:

1. A minimum 0.5 mg/l chlorine residual shall be maintained in the tank throughout the inspection.
2. All equipment entering the tank shall be dedicated for potable water use and be disinfected with a 200 ppm chlorine solution.
3. For all concrete ground reservoirs with cracks or signs of leakage, the top shall be soaked with water and the interior shall be checked for leaks.
4. A minimum of 2 bacteriologically safe samples shall be obtained from the tank after the inspection, one immediately following the inspection and one 24 hours later.

(3) **DEPARTMENT NOTIFICATION.** The department's regional drinking water staff person shall be given 48 hours prior notice of the date and time of the inspection.

(4) **INSPECTION REPORT SUBMITTAL.** Upon completion of the water storage facility inspection, a completed department report form shall be submitted to the department's regional drinking water staff person documenting the condition of the storage facility. The water supplier shall submit copies of any additional reports and videos prepared by the inspector.

Note: The report forms are available from the department's regional or central office drinking water program staff.

(5) **MANHOLE COVER GASKET.** Following all inspections and maintenance, the integrity of the gasket between the access manhole cover and curbing shall be checked and replaced if necessary to prevent the entrance of dust and insects. If no gasket is present,

one meeting s. NR 811.64 (7) requirements shall be provided to prevent the entrance of dust and insects.

History: CR 09-073; cr. Register November 2010 No. 659, eff. 12-1-10.

NR 810.15 Cross connections and interconnections. Unprotected cross-connections are prohibited. Cross-connections shall be protected as required in s. SPS 382.41. Water system interconnections are prohibited except as provided in sub. (2). In addition the following requirements shall be met:

(1) **CROSS CONNECTION CONTROL PROGRAM.** In order to protect the public water supply system, the water supplier for every municipal water system shall develop and implement a comprehensive cross connection control program for the elimination of all existing unprotected cross-connections and prevention of all future un-protected cross connections to the last flowing tap or end-use device. The program may include providing public education materials in lieu of inspections of low hazard portions of residential or commercial facilities. Low hazard areas consist of normal kitchen and bathroom fixtures. The water supplier shall keep a current record of the cross connection control program available for annual review by the department. The cross connection control program shall include:

(a) A complete description of the program and the administration procedures, including designation of the inspection or enforcement agency or agencies.

(b) Local authority for implementation of the program, such as ordinance or other governing rule.

(c) A time schedule for public education materials, surveys and follow up surveys of consumer premises for cross connections including appropriate record keeping. Unless otherwise authorized by the department, water suppliers for each municipal water system shall cause a survey to be conducted for every residential service a minimum of once every ten years or on a schedule matching meter replacement. Public educational materials, when being provided in lieu of low hazard inspections, shall be provided to the customer no less than every 3 years and with every cross connection survey. Unless a detailed alternative schedule is included in the cross connection control program and is approved by the department, water suppliers for each municipal water system shall cause a survey to be conducted for every industrial, commercial and public authority service a minimum of once every 2 years. Commercial properties of similar or lesser risk to residential properties may follow the same schedule as residential properties. Completed survey results shall be maintained by the water supplier until corrections and follow up surveys have been made.

(d) A complete description of the methods, devices, and assemblies which will be used to protect the potable water supply. Compliant methods, devices and assemblies are listed in s. SPS 382.41.

(e) Provisions for denial or discontinuance of water service, after reasonable notice, to any premises where an unprotected cross connection exists or where a survey could not be conducted due to denial.

(f) Submission to the department of a copy of an ordinance establishing a cross connection control program, an annual report including a total number of all service connections by category, and a report indicating the number of surveys completed in each category for that year.

(2) **INTERCONNECTIONS WITH OTHER ACCEPTABLE WATER SOURCES.** Interconnections between the public water supply system and another source of water are prohibited unless permitted by the department in individual cases. Approval of the department shall be obtained prior to the interconnection.

History: CR 09-073; cr. Register November 2010 No. 659, eff. 12-1-10; correction in (intro), (1) (d) made under s. 13.92 (4) (b) 7., Stats., Register January 2012 No. 673.

NR 810.16 Local well regulation program. Water suppliers for municipal water systems and communities served by a municipal water system, shall implement a program for the regulation of wells which are not part of the municipal water system

and are located on premises served by the municipal water system. Regulation is required to prevent unused, unsafe and noncomplying wells from acting as vertical conduits for aquifer contamination or as sources of unsafe water that could enter the public water system through cross connections. Implementation shall be by local ordinance or utility rule. The ordinance or rule shall include:

(1) A requirement that all water supply wells that do not have valid operational permits issued pursuant to sub. (2), wells which are not routinely used, wells which are in noncompliance with ch. NR 812, or wells which test bacteriologically unsafe, shall be properly sealed and abandoned in accordance with ch. NR 812 by an established date not to exceed one year from date of connection to the public system, or date of discovery or construction.

(2) Provisions for a well operation permit renewable not less frequently than every 5 years that will allow retention and operation of wells which are safe and in compliance with ch. NR 812 with the limitation that the well shall be functional and the owner shall demonstrate a need for use. The permit shall require:

(a) That a minimum of one safe sample be taken prior to issuing or reissuing the permit to establish that the water is bacteriologically safe.

(b) That the well and pump system be evaluated by a licensed well driller or pump installer and certified to comply with ch. NR 812 subch. IV, prior to issuing the initial permit and no less than every 10 years afterwards.

(c) Prohibition of unapproved cross-connections between any private well and pump installations and the municipal water system.

(3) Written documentation of the well and pump inspection indicating compliance with ch. NR 812 requirements using standardized forms provided by the department.

(4) Submission of a copy of the well regulation ordinance or rule to the department.

History: CR 09-073; cr. Register November 2010 No. 659, eff. 12-1-10.

NR 810.17 Temporary water supply and pressure.

(1) Water conduits used for the temporary supply of water because of water main breaks or replacement shall be of materials approved either by ch. SPS 382 as water service or private water main materials or by ch. NR 811 as water main materials. Piping materials may be reused but may not have been previously used for purposes other than providing potable water. The lines shall be disinfected in accordance with AWWA Standard C651-05.

(2) Fire hoses may be used for emergency service to customers. However, the water consumers shall be notified by the water supplier not to use the water provided for drinking or food preparation.

(3) Distribution systems or pressure zones served by a single elevated tank shall maintain normal pressures as specified in s. NR 810.10 when the tank is taken out of service for inspection and maintenance by one of the following methods:

(a) Installation of one or more pressure blow-off valves on a hydrant or hydrants at the opposite end of the system from the source of water.

(b) Installation of a temporary pressure tank connected to the system through a fire hydrant. The hydrant shall be flushed and disinfected prior to being connected to the pressure tank. The connection shall be with a reinforced high pressure neoprene hose dedicated for potable water use. An air compressor or other suitable means shall be provided to add air to the tank. All compressors used to routinely add air to tanks shall be oil-less. Larger capacity compressors that are not oil-less may be used temporarily to fill a tank upon startup, repair or service but shall be fitted with a filter and any other appurtenances necessary to remove particulates and oil. The pressure tank and connecting hose shall be disinfected and sampled in accordance with s. NR 810.09 (4). Adequate security measures shall be provided for the tank and hose.

(4) The connection to a hydrant for purposes other than fire fighting shall meet the requirements in s. SPS 382.41.

History: CR 09-073; cr. Register November 2010 No. 659, eff. 12-1-10; correction in (1) and (4) made under s. 13.92 (4) (b) 7., Stats., Register January 2012 No. 673.

NR 810.18 System loss and unaccounted water. All public water systems regulated by the public service commission shall be operated to comply with s. PSC 185.85 that defines system losses and sets standards for unaccounted-for water.

History: CR 09-073; cr. Register November 2010 No. 659, eff. 12-1-10.

NR 810.19 Discharge of system or backwash water.

Water discharged to the ground surface or storm sewers as part of flushing the distribution system, draining or disinfecting reservoirs, or as part of operation of a water treatment facility shall comply with the applicable general permit to discharge under the Wisconsin pollutant discharge elimination system (WPDES) as per the provisions of ch. 283, Stats. Discharge directly to a surface water is prohibited unless specific approval is obtained prior to the discharge.

History: CR 09-073; cr. Register November 2010 No. 659, eff. 12-1-10.

NR 810.20 Approval of operational changes or maintenance projects.

Water suppliers shall notify the department of any operational changes involving adjustment of chemical addition, filtration, or other operational parameters that may impact the quality of water produced. Temporary changes to manage water quality variations do not require department approval provided the operation remains within prior approved target ranges. Use of alternate chemicals, adjustment outside prescribed treatment ranges previously approved by the department, or permanent operational changes may not be made unless approved by the department prior to the change.

Note: Modifications of chemical dosages or changes in chemicals may significantly alter the corrosion characteristics of the water as well as impart odors and tastes. Careful consideration of the impact to water chemistry should be given prior to adjusting chemical treatment.

History: CR 09-073; cr. Register November 2010 No. 659, eff. 12-1-10.

NR 810.21 Unattended water treatment plant operation.

Water treatment plants may be operated remotely or by use of on site supervisory control and data acquisition (SCADA) systems provided the water distribution system has sufficient storage, as determined by engineering analysis, to allow response and resolution to problems. Unattended water treatment plants treating for acute contaminants shall be provided with:

(1) Alarms for all critical features including:

- (a) Pump failure.
- (b) Reservoir, clearwell, or basin overflow or low level.
- (c) Station flooding.
- (d) Chemical feeder failure.
- (e) Chemical feed over or under desired range.
- (f) Critical equipment failure.
- (g) Intrusion.
- (h) Power failure.

(2) An operations manual describing alarms, operator responses to alarms, quality control and challenge testing for the communication and control systems, operation and maintenance of the control systems, and identifying primary and secondary responders.

(3) A flow diagram showing the location of critical features, alarms, and automated controls.

(4) Manual override of all treatment plant operations and functions.

(5) Daily on-site operator visits to verify plant operation and security.

(6) Designation of standby operators during times of unattended operation.

(7) Battery back up for control systems.

the year. A public water system is either a “community water system” or a “non–community water system.” A system:

(a) Includes any collection, treatment, storage and distribution facilities under control of the operator of the system and used primarily in connection with the system.

(b) Includes any collection or pretreatment storage facilities not under the system’s control which are used primarily in connection with the system.

Note: The definition of public water system as regulated by this chapter is broader and includes more water systems than those governed by the public service commission under its definition of a public utility in ch. 196, Stats.

(57) “Pump installer” or “licensed pump installer” has the same meaning as “licensed pump installer,” given in s. 280.01 (2c), Stats.

Note: The statutory definition of “licensed pump installer” is any individual who has paid the annual license fee under s. 280.15 (2m) (c) 2., Stats., and obtained a license under s. 280.15 (2m), Stats., as a pump installer.

(58) “Pump installing” has the meaning given in s. 280.01 (5), Stats.

Note: The statutory definition of “pump installing” means the industry and procedure employed in the placement and preparation for operation of equipment and materials utilized in withdrawing or obtaining water from a well for consumption or use, including all construction involved in making entrance to the well and establishing such seals and safeguards as are necessary to protect such water from contamination.

(59) “Recharge area” means the total land area contributing water to a well.

(60) “Regional flood” means a flood determined to be representative of large floods known to have occurred in Wisconsin or which may be expected to occur on a particular lake, river or stream once in every 100 years.

(61) “Residual disinfectant concentration” (“C” in CT calculations) means the concentration of disinfectant measured in mg/l in a representative sample of water.

(62) “Reviewable project” has the meaning given in s. NR 108.02 (13).

(63) “SCADA” means Supervisory Control and Data Acquisition, a computer system used for gathering and analyzing real time data used to monitor and control water systems and their components.

(64) “Spring” has the meaning given in s. 281.34 (1) (f), Stats.

Note: Section 281.34 (1) (f), Stats., defines “spring” to mean “an area of concentrated groundwater discharge occurring at the surface of the land that results in a flow of at least one cubic foot per second at least 80% of the time.”

(65) “Supplier of water” has the same meaning as “owner” given in sub. (44).

(66) “Surface water” means all water which is open to the atmosphere and subject to surface runoff.

(67) “Surface water systems” means public water systems using surface water or groundwater under the direct influence of surface water as a source and that are subject to the requirements of 40 CFR 141, subpart H, P, and W, which contains the national primary drinking water regulations.

(68) “Treated drinking water” means potable water that has been subjected to treatment methods approved by the department to comply with the primary drinking water standards contained in ch. NR 809 and which is obtained directly from a municipal water system via piping from the municipal water distribution system to the point of underground injection.

(69) “Underground injection” means placement of any substance underground through a well, drillhole or water system.

(70) “Utility” means a public utility as defined in ch. 196, Stats.

(71) “UV” means ultraviolet light.

(72) “Variable output control device” means a physical or electronic device such as a control valve, variable speed drive unit, variable frequency drive unit or similar device to be used to control the gallon per minute pump discharge rate and/or distribution system pressure.

(73) “Virus” means a virus of fecal origin which is infectious to humans by waterborne transmission.

(74) “Waterworks” or “water system” means all facilities, structures, pipes, conduits and appurtenances by means of which water is delivered to consumers except piping and fixtures inside buildings served, water services and private water mains as defined in ch. SPS 381.

(75) “Well” has the meaning given in s. 281.34 (1) (h), Stats.

Note: Section 281.34 (1) (h), Stats., defines “well” to mean “any drillhole or other excavation or opening deeper than it is wide that extends more than 10 feet below the ground surface and is constructed for the purpose of obtaining groundwater.”

(76) “Well driller” or “licensed well driller” has the same meaning as “licensed well driller,” given in s. 280.01 (2m), Stats.

Note: The statutory definition of “licensed well driller” is any individual who has paid the annual license fee under s. 280.15 (2m) (c) 1., Stats., and obtained a license under s. 280.15 (2m), Stats., as a well driller.

(77) “Well drilling” has the meaning given in s. 280.01 (8), Stats.

Note: The statutory definition of “well drilling” is the industry and procedure employed in obtaining groundwater from a well by digging, boring, drilling, driving or other methods but not including the driving of points for the purpose of obtaining groundwater. It shall also include all construction work and installation of well casings in said well involved therein for the protection of such well water against pollution.

(78) “WPDES permit” means the Wisconsin pollutant discharge elimination system permit issued by the department under ch. 283, Stats., for the discharge of pollutants.

(79) “Year–round resident” means a resident who resides in the same living unit for 6 months per year or more.

(80) “Zone of influence” means the area of the cone of groundwater depression formed when the well pump is operating.

History: CR 09–073: cr. Register November 2010 No. 659, eff. 12–1–10; correction in (23), (74) made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672; correction in (54) made under s. 13.92 (4) (b) 6., Stats., Register February 2012 No. 674.

NR 811.03 Alternative requirements. (1) If the owner of a proposed reviewable project determines that compliance with the design requirements of this chapter is impracticable, the owner may submit in writing to the department prior to submission of final plans a request to use alternative criteria. This request shall contain the reasons that compliance with the design criteria is impracticable and alternative criteria for which department approval is sought and all pertinent facts, data, reports and studies supporting the proposed alternative.

(2) If the department determines that compliance with the design requirements of this chapter would be impracticable in any specific case, or that an alternative proposed has additional benefits with adequate safeguards, it may approve alternative criteria which are in substantial compliance with the requirements of this chapter.

History: CR 09–073: cr. Register November 2010 No. 659, eff. 12–1–10.

NR 811.04 Drinking water standards. Where practical, the quality of the raw water source shall meet the primary maximum contaminant levels of ch. NR 809 and other applicable requirements of ch. NR 809 and this chapter without treatment. In all cases, the quality of finished water supplied to consumers at the point–of–entry to the distribution system shall meet the primary drinking water standards contained in ch. NR 809. Department–approved water treatment shall be installed where necessary to meet this requirement.

History: CR 09–073: cr. Register November 2010 No. 659, eff. 12–1–10.

NR 811.05 Underground placement of substances. The use of any well, drillhole or water system for the underground placement of any substance shall be prohibited unless it is a department approved activity necessary for the construction, rehabilitation or routine operation of the well or water system.

History: CR 09–073: cr. Register November 2010 No. 659, eff. 12–1–10.

NR 811.06 Cross–connections and interconnections. Unprotected cross–connections are prohibited. Cross–connections shall be protected as required in s. SPS 382.41. Water

system interconnections are prohibited except as provided in s. NR 811.07.

History: CR 09-073; cr. Register November 2010 No. 659, eff. 12-1-10; correction made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.

NR 811.07 Interconnections with other acceptable water sources. Interconnections between the public water supply system and another source of water are prohibited unless permitted by the department in individual cases. Approval of the department shall be obtained prior to making the interconnection.

History: CR 09-073; cr. Register November 2010 No. 659, eff. 12-1-10.

Subchapter I — Submission of Plans

NR 811.08 General requirements. (1) **PLANS AND SPECIFICATIONS REQUIRED.** The owner of a community water system shall submit plans and specifications for all reviewable projects in accordance with ch. NR 108. Plans and specifications shall comply with or incorporate the general design and operating requirements in this chapter and chs. NR 108 and 810. Worksheets shall be included with all submittals for reviewable projects for which applicable worksheets are provided by the department.

(2) **APPROVALS REQUIRED.** Written department approval shall be obtained prior to starting construction for all reviewable projects as defined by s. NR 108.03 (1). The department may deny approval or grant a limited approval in cases where the requirements of this chapter are not met.

(3) **PROJECTS REQUIRING DEPARTMENT APPROVAL BUT NOT REQUIRING SUBMITTAL BY A PROFESSIONAL ENGINEER.** The requirements for the submittal of plans and specifications for reviewable projects are in ch. NR 108. The water supply owner or the owner's representative may submit reviewable projects to the department for approval without the seal of a professional engineer registered in Wisconsin for most operation and maintenance work and for all non-subdivision, other-than-municipal water systems as provided in s. NR 108.04 (2) (c) 2. Plans shall be submitted by a registered well driller or pump installer where applicable. Examples of projects not requiring a professional engineer's seal are pump replacement with similar equipment not affecting pumping capacity; test well construction when to be pumped at a rate of 70 gallons per minute or more for a minimum duration of 72 hours, unless the well is to be converted to a municipal or subdivision well; well reconstruction work; pump base reconstruction work; pumphouse pump discharge piping and appurtenance replacement; well rehabilitation work as described in s. NR 811.12 (11) to (13); changing chemical type when the chemical feed equipment has been previously approved by the department; and painting or coating elevated water storage tank, reservoir, and hydro-pneumatic tank interiors.

History: CR 09-073; cr. Register November 2010 No. 659, eff. 12-1-10.

NR 811.09 Specific requirements for waterworks, plans, specifications and engineering reports.

(1) **PLANS.** (a) *General.* The detailed construction plans shall contain appropriate plan and profile views, elevations, sections and supplemental views which together with the specifications provide all necessary information for construction of the improvements. The elevations shall be based on sea level datum or local datum when a conversion to sea level datum is provided. Manufacturer's drawings are not acceptable as construction plans and will not be approved. Other state and local codes, including those of the department of safety and professional services, the public service commission, and the department of health services, shall be consulted for other requirements where applicable.

(b) *Wells.* 1. A general plan shall be submitted which shows the location of the proposed well and its relation to proposed or existing water supply facilities. It shall show all features of sanitary significance which could have an effect on water quality. A separate well site plan shall be submitted which shows the property lines, contours or an appropriate number of spot elevations so

that drainage can be determined, surficial features, structures, and any other relevant data. The well site plan shall also show the locations of all the observation wells, monitoring wells, test wells, treatment wells, or other wells to be constructed in relation to the well site and all permanent supply wells to be constructed on the site. A detailed well cross-section shall be submitted which shows the size and depths of drill holes and casings, depth of grout, and geological formations to be penetrated.

2. A copy of a well site investigation report shall be submitted as required in sub. (4) prior to or along with the plans submitted to the department for all final wells or applicable test wells as described in s. NR 811.12 (1) (g) 2. Based upon a review of the submitted well site investigation report, the department may perform an on-site inspection of the well site. Wellhead protection criteria conforming to s. NR 811.12 (6) shall be considered when siting wells. In addition, drawdown effects from the pumping or test pumping of test wells and final wells shall be considered during well siting and design. Information on possible drawdown effects on nearby private wells, public wells, or surface water bodies from pumping test wells or final wells and the means to be provided for measuring the effects shall be included with all submittals to the department where significant drawdown may occur or when required by the department.

3. Plans and specifications shall be submitted prior to the construction of any test well to be pumped at a rate of 70 gallons per minute or more for a duration of 72 hours or more. When it is known with reasonable certainty that any proposed test well will be converted to a final well the plans and specifications for the final well shall be submitted for department approval prior to construction of the test well.

(c) *Surface water intakes.* 1. 'Location plan.' Plans shall show the location of the intake pipeline and crib relative to the low lift pumping facility. The pipeline shall be referenced by bearing and distance, and the crib location shall be defined by latitude and longitude.

2. 'Detailed plans.' A profile of the proposed pipeline and crib shall be provided in addition to construction plans.

(d) *Treatment plants.* 1. 'Location plan.' The location plan shall show the location of the treatment plant in relation to the remainder of the water system and the water source or intake.

2. 'Layout.' The general layout plans shall include a contour map of the site, the site size, the size and location of plant structures, a schematic flow diagram indicating the various plant units, the piping layout, and a hydraulic profile at gravity plants.

3. 'Detailed plans.' The detailed construction plans shall include the location, dimensions, elevations and details of all existing and proposed plant units or equipment.

(e) *Chemical feed equipment.* The plan shall include a layout of the waterworks structure and piping. All of the following locations and details of the proposed equipment shall be included:

1. Descriptions and specifications of feed equipment, including anti-siphon devices and feed ranges.
2. Location of feeders, piping layout and points of application.
3. Storage and handling facilities.
4. Specifications for chemicals to be used.
5. Operating and control procedures.
6. Description of testing equipment and procedures.
7. Well or booster pump discharge rates and pressures.
8. Emergency eyewash and shower units.

(f) *Pumping facilities.* The plan shall show a general layout of the pumping equipment, pump bases, suction and discharge lines and related appurtenances.

(g) *Buildings.* The plans shall show the locations of all buildings and other site improvements in relation to the site property boundaries. The following details shall be included, where applicable:

(125) “Well–point driving” means constructing a well by joining a drive point screen with lengths of pipe and driving the assembly into the ground with percussion equipment or by hand, but without removing material from a drillhole more than 10 feet below the ground surface.

(126) “Well vent” means a screened opening in a well seal to allow atmospheric pressure to be maintained in the well.

(127) “Well yield” means the quantity of water which may flow or be pumped from the well per unit of time.

(128) “Zone of saturation” means that part of the earth’s crust beneath the shallowest water table in which all voids are filled with water under pressure greater than atmospheric.

History: Cr. Register, January, 1991, No. 421, eff. 2–1–91; am. (3), (4), (48), (61m), (74) (b), (79), (81), (82), (107) and (119), cr. (27m) (30f), (30m), (30), (30x), (72m), (79m), (97m) and (110m), renum. (36) and (39) to be (61q) and (61u) and am. Register, September, 1994, No. 465, eff. 10–1–94; corrections made under s. 13.93 (2m) (b) 7., Stats., Register, September, 1994, No. 465; correction in (29), (30) and (79m) made under s. 13.93 (2m) (b) 6. and 7., Stats., Register, September, 1996, No. 489; corrections in (50), (81), (97), (123) and (124) made under s. 13.93 (2m) (b) 7., Stats., Register, December, 1998, No. 516; correction in (71) made under s. 13.93 (2m) (b) 7., Stats., Register July 2002 No. 559; CR 05–020; cr. (24m) and (57w) Register January 2006 No. 601, eff. 2–1–06; corrections in (28) and (56) made under s. 13.92 (4) (b) 6. and 7., Stats., Register July 2010 No. 655; correction in (29), (97) made under s. 13.92 (4) (b) 6., 7., Stats., and (29) renumbered to (35g) under s. 13.92 (4) (b) 1., Stats., Register December 2011 No. 672; CR 13–096; am. (33) (a), cr. (50e), CR 13–099; cr. (1d), (1h), (1p), (1t), am. (3), (4), (6), (10), cr. (10m), (17m), (19m), am. (23), (24), cr. (27f), (29m), am. (35), cr. (35e), am. (38), cr. (41m), (47m), am. (49), renum. (51) to (50), (52) to (51), am. (53), (54), cr. (54g), (54r), (55m), am. (57m), cr. (57s), am. (60), cr. (61g), am. (64), (67), (72), (74) (b), cr. (74) (c) to (e), (75c), (75g), (75L), (75p), (75t), (75x), (79e), (79p), (79t), am. (80), cr. (80m), r. and recr. (82), am. (84), cr. (85m), am. (86), (90), (91), (93) (intro.), (a), (94), cr. (94g), (94r), (96g), am. (104) to (108), cr. (108r), (110s), renum. (112g) to (111m), cr. (112m), (112v), (119g), am. (122), r. and recr. (124), cr. (124m) Register September 2014 No. 705, eff. 10–1–14; correction in (67) made under s. 35.17, Stats., Register September 2014 No. 705.

NR 812.08 Water well, heat exchange drillhole, reservoir and spring location. (1) GENERAL. Any potable or nonpotable well, reservoir, or spring shall be located:

(a) So the well and its surroundings can be kept in a sanitary condition.

(b) At the highest point on the property consistent with the general layout and surroundings if reasonably possible, but in any case protected against surface water flow and flooding.

(c) As far away from any known or possible source of contamination as the general layout of the premises and the surroundings allow.

Note: Section PSC 114.234 (6) requires that a horizontal clearance of at least 3/4 of the vertical clearance of the conductors, including overhead power lines to the ground required by Rule 232 shall be maintained between open conductors and wells. Persons installing wells must comply with this requirement.

(d) Such that any potential contaminant source, not identified in this section or in Table A, is a minimum of 8 feet from the well, reservoir, or spring.

(e) Every well shall be located so that it is reasonably accessible with proper equipment for cleaning, treatment, repair, testing, inspection and any other maintenance that may be necessary.

(f) In a manner to meet the additional location and construction specifications of s. NR 812.12 (3), (15), (16), and (17).

(2) RELATION TO BUILDINGS. In relation to buildings, the location of any potable or nonpotable well shall be as follows:

(a) When a well is located outside it shall be located so that the top of the well casing pipe extends at least 12 inches above the final established ground grade and in a manner such that it is not directly in line with a rainwater downspout outlet or other similar clear water discharge that creates a sanitary hazard to the well.

Note: The department recommends that when a well is located adjacent to a building, it be located so the center line of the well extended vertically will clear the overhang of any building by not less than 2 feet to allow for well reconstruction and for pulling the pump.

(b) When a structure is built over a drilled well, it shall have an easily removable access hatch, or provide other practicable access to allow for pulling and servicing the pump. The well casing pipe shall extend at least 12 inches above ground grade or

above the ground–grade floor of the building and shall be sealed watertight at the point where it extends through the floor.

(c) No well may be located, nor a building constructed, such that the well casing pipe will terminate in a basement or extend through the basement of any building or terminate under the floor of a building having no basement. A well may not terminate in or extend through a crawl space having a below ground grade depression or excavation.

Note: Wells terminating in basements and below–grade crawl spaces often pose a sanitary hazard to safe drinking water so they have not been allowed to be constructed, nor have screens been allowed to be replaced since April 10, 1953. Many wells terminating in basements or crawl spaces do not meet the requirements of Subchapter IV.

Note: This paragraph does not apply to wells located in alcoves or subsurface pumprooms adjoining a basement.

(d) The top of a well casing pipe may terminate in a walkout basement if the following conditions are met:

1. It is possible to walk directly outside from the walkout basement without walking upstairs or upslope.

2. The surface of the ground around the outside exit door of the walkout basement slopes down away from the door.

3. The well and pump installation are accessible for repair and removal.

4. The well produces water continuously free from contaminants in excess of the drinking water standards of s. NR 812.06.

5. The well casing pipe depth meets the requirements of s. NR 812.42 (1) (b).

6. The well and pump installation are in compliance with all other requirements of this chapter.

7. The walkout basement is not subject to flooding

8. The walkout basement is not in a floodway or floodplain.

(e) A well may not terminate in or extend through a crawl space having a below grade depression or excavation.

(f) If a well must be located in a driveway, parking area, walkway or other high traffic area due to lot size or to meet minimum required separation distances between the well and contaminant sources, the well may be contained within a driveway ramp structure without department approval providing the driveway ramp meets the specifications of s. NR 812.36. Driveway ramps may not be constructed or located in a floodway or floodplain.

(g) A yard hydrant may not be installed within or on a well.

(3) RELATION TO FLOODPLAINS. (a) A potable or nonpotable well may be constructed, reconstructed or replaced in a floodfringe provided that the top of the well is terminated at least 2 feet above the regional flood elevation for the well site.

(b) A well may be reconstructed or replaced in a floodway provided that the top of the well is terminated at least 2 feet above the regional flood elevation for the well site.

(c) A well may not be constructed on a floodway property that is either undeveloped or has building structures but no existing well.

(d) The regional flood elevation may be obtained from the department.

(4) RELATION TO CONTAMINATION SOURCES. Minimum separating distances between any new potable or nonpotable well, heat exchange drillhole, reservoir or spring and existing sources of contamination; or between new sources of contamination and potable or nonpotable wells, heat exchange drillholes, reservoirs or springs shall be maintained as described in this subsection. The minimum separating distances of this subsection do not apply to dewatering wells approved under s. NR 812.09 (4) (a). Greater separation distances may be required for wells requiring plan approval under s. NR 812.09. Separation distance requirements to possible sources of contamination will not be waived because of property lines. Separation distances shall be measured from the edge of the well, reservoir or spring, to the nearest edge of the contamination source. Minimum separating distances are listed in Table A and are as follows:

- (a) Eight feet between a well or reservoir and a:
1. Buried gravity flow sanitary building drain having pipe conforming to ch. [SPS 384](#);
 2. Buried gravity flow sanitary building sewer having pipe conforming to ch. [SPS 384](#);
 7. Cistern;
 9. Noncomplying pit, subsurface pumphouse, alcove, or reservoir;
 10. Nonpotable well;
 11. Fertilizer or pesticide storage tank with a capacity of less than 1,500 gallons, but only if the well is nonpotable and if the tank is not buried;

Note: For potable wells and buried tanks, see par. (d) 1.

12. Plastic silage storage and transfer tube;
14. Swimming pool, measured to the nearest edge of the water;
15. Dog or other small pet house, pet animal shelter or kennel housing not more than 5 adult pets on a residential lot;
16. A ditch, but not including a river or stream;

Note: For the minimum separating distance to a river or a stream, see par. (b) 7.

17. Buried liquid propane (L.P.) gas tank as specified in ch. [SPS 340](#); or
 18. Buried storm collector sewer or stormwater culvert.
- (b) Twenty-five feet between a well or reservoir and a:

1. Buried grease interceptor or trap;
2. A septic tank, a POWTS treatment component, or a wastewater sump;

Note: A POWTS treatment component includes a private wastewater treatment tank.

3. A holding tank or POWTS holding component;
4. Buried sanitary building drain or sanitary building sewer having pipe not conforming to ch. [SPS 384](#);
5. Buried pressurized sanitary building sewer having pipe conforming to ch. [SPS 384](#);

6. Buried gravity manure sewer;
7. Lake, pond, river, stream, or stormwater detention basin, measured to the regional high water elevation in the case of a lake or pond, to the edge of the floodway in the case of a river or stream, or to the edge in the case of a stormwater detention basin;

Note: The separation distance requirements of this subsection do not apply to synthetically-lined decorative yard ponds located on residential lots.

11. Buried pressurized sewer pipe conveying manure provided that the pipe meets ASTM specification D-2241, with standard dimension ratio of 21 or less or pressure pipe meeting the requirements of s. [NR 110.13](#) or [811.62](#);

12. Fuel oil tank, serving a single family residence including any associated surface or buried piping;

14. Vertical shaft installed below grade used for intake of air for a heating or air conditioning system; or

15. Buried sanitary collector sewer serving 4 or fewer living units or having a diameter of 6 inches or less; or

16. Surface or basement liquid petroleum product tank with a capacity less than 1,500 gallons.

Note: The department recommends that potable wells be installed at least 25 feet from an agricultural crop field, sludge or septage landspreading or drying area.

- (c) Fifty feet between a well or reservoir and a:

1. POWTS dispersal component or a soil absorption unit receiving less than 12,000 gallons per day of design wastewater flow, including any existing, replacement or abandoned POWTS dispersal component or a soil absorption unit, within 3 years of abandonment, but not including a school soil absorption unit or a POWTS dispersal component. This subdivision includes absorption units both regulated and not regulated by ch. [SPS 383](#), but does not include a separation requirement for school wells;

Note: For the minimum separation requirement for soil absorption units relative to school wells, see par. (e); for soil absorption units or POWTS dispersal components receiving more than 12,000 gallons per day of design wastewater flow see par. (f) 3.

2. Privy or pit privy;
3. Pet waste pit disposal unit;
4. Animal barn or animal shelter;
5. Animal yard;
6. Silo;
7. Buried sewer used to convey manure having pipe conforming to ch. [SPS 384](#) that does not meet the specifications in par. (b);
8. Liquid tight manure hopper or reception tank;
9. Filter strip;

10. Buried sanitary collector sewer serving more than 4 living units or larger than 6 inches in diameter. The department's Bureau of Watershed Management, under s. s. [281.41](#), Stats., may approve the installation of a collector sewer at a distance of less than 50 feet from a well if the sewer is installed a distance of at least 25 feet from the well, and if, within a 50-foot radius of the well, the sewer pipe meets the AWWA requirements for water main equivalent type, and if the sewer is installed in a manner that meets the leakage requirements of AWWA C600;

Note: AWWA C600 is a standard for the "Installation of Ductile-Iron Water Mains and Their Appurtenances" and provides, in section 5.2, hydrostatic water-pressure testing methods and the allowable leakage allowances.

11. An influent sewer to a wastewater treatment plant;
12. The nearest existing or future grave site in cemeteries;
13. Wastewater treatment plant effluent pipe;
14. Buried pressurized sewer having pipe not conforming to ch. [SPS 384](#);
15. Manure loading area;

16. Bulk surface storage tank or other container with a capacity less than or equal to 1,500 gallons for any solid, semi-solid or liquid product, including any associated above ground piping, but not including any associated buried piping regulated under par. (d) 1. This subdivision includes, but is not limited to petroleum barrels, drums, product tanks and waste oil tanks. This subdivision does not include septic, holding, and manure reception tanks; tanks regulated under par. (a) 11., fuel oil tanks regulated under par. (b) 12. or liquid propane tanks regulated under par. (a) 17.;

17. Barn gutter;
18. Animal barn pen;
19. Outlet from a milk house drain; or
20. Vegetated treatment area.

- (d) One hundred feet between a well or reservoir and a:

1. Bulk surface storage tank with a capacity greater than 1,500 gallons or any bulk buried storage tank including, for both surface or buried tanks, regardless of capacity, any associated buried piping, for any solid, semi-solid or liquid product but not including those regulated under par. (b) 12. or (c) 16. This subdivision includes, but is not limited to petroleum product tanks, waste oil tanks and pesticide or fertilizer storage tanks not regulated under par. (a) 11. This subdivision does not include septic, holding and manure reception tanks;

2. Liquid-tight, fabricated manure or silage storage structure, in ground or at ground surface;

3. Wastewater treatment plant structure, conveyance or treatment unit;

4. Dry fertilizer or pesticide storage building or area when more than 100 pounds of either or both materials are stored, in packages or in bulk;

5. Well, drillhole or water system used for the underground placement of any waste, surface or subsurface water or any substance as defined in s. [160.01](#) (8), Stats.;

6. Stormwater infiltration basin or system;
7. Uncovered storage of silage on the ground surface;
8. Water-tight silage storage trench or pit;
9. Lift station.

10. Recycling facility or scrap metal processing facility;

- 11. Liquid-tight sludge drying bed; or
 - 12. Pesticide or fertilizer mixing or loading area.
- (e) Two hundred feet between a school well and a soil absorption unit receiving less than 8,000 gallons per day, existing or abandoned.
- (ee) One hundred fifty feet between a well or reservoir and a temporary manure stack.
- (f) Two hundred fifty feet between a well or reservoir and a:
- 1. Manure stack.
 - 2. Earthen or excavated manure storage structure or waste storage facilities.
- Note:** Variances from the separating distances may be granted as specified in s. NR 812.43 for earthen storage and manure stacks constructed and maintained to the previous specifications of Soil Conservation Standards No. 425 or 312, or for waste storage facilities constructed and maintained to the present specifications of Natural Resources Conservation Service Standard No. 313.
- 3. Soil absorption unit receiving 8,000 or more gallons per day, existing, abandoned, or alternate.
 - 4. Sludge landspreading or drying area.
 - 5. An earthen silage storage trench or pit.
 - 6. Liquid waste disposal system including, but not limited to a treatment pond or lagoon, ridge and furrow system and spray irrigation system.
- Note:** Variance from this separating distance may be granted for treatment ponds or lagoons constructed and maintained to an approval granted under ch. NR 213.
- 7. Salvage yard or junkyard.

- 8. A salt or deicing material storage area including the building structure and the surrounding area where the material is transferred to vehicles. This subdivision includes those structures or areas that store deicing material mixtures of sand and salt that have a salt content at or exceeding 5%, but does not include bagged deicing material.
 - 9. Solid waste processing facility.
 - 10. Solid waste transfer facility.
 - 11. The boundaries of a landspreading facility for spreading of petroleum-contaminated soil regulated under ch. NR 718 while that facility is in operation.
- (fm) Five hundred feet between a well and an existing quarry or proposed quarry expansion.
- (g) Twelve hundred feet between a well or reservoir and:
- 1. The nearest edge of the limits of filling of an existing, proposed or abandoned landfill, measured to the nearest fill area of abandoned landfills, if known. Otherwise measured to the nearest property line where the landfill is located. The department may require, as part of a variance request, a land survey map, a scaled diagram of the landfill and the well location, or another accurate measurement method to determine and demonstrate the distance between the landfill and the well;
 - 2. The nearest edge of a coal storage area in excess of 500 tons; or
 - 3. A hazardous waste treatment facility regulated by the department.

**TABLE A
MINIMUM SEPARATION DISTANCE REQUIREMENTS BETWEEN POTABLE OR NONPOTABLE WELLS,
RESERVOIRS, SPRINGS AND POSSIBLE SOURCES OF CONTAMINATION**

For the list according to separation distance, see s. NR 812.04 (4)

New installations shall meet the separation requirements in the far-right column. Existing installations shall meet the separation requirements in effect at the time of construction, those in effect at the time of installation of the possible source of contamination, if later, or the requirements adopted on October 1, 2014

Source	Prior to [@] Oct. 1975	Oct. 1975 to Oct. 1981	Oct. 1981 to Jan. 1991	Feb. 1991 to Oct. 1994	Oct. 1994	After Oct. 1, 2014
Absorption Unit (field), soil [See Soil Absorption Unit] (Also known as a POWTS dispersal component)	50	50	50	50	50	50
Agricultural crop field	None	None	None	None	None	25'
Note: Not a requirement—only a recommendation						recommended
Air shaft—heating/air conditioning (Vertical, Below grade)	None	None	None	None	25'	25'
Animal Barn	—	—	—	—	—	50'
Animal Barn Pen	None** (25/20)**	25'	25'	25'	25'	50'
Animal Shelter (not including small residential pet shelter or pet kennel housing 5 or fewer adult pets)	None** (50/25)**	50'	50'	50'	50'	50'
Animal Yard—Includes Calf Hutch (but not including residential lot dog kennel enclosing 5 or fewer adult pets)	None**	50'	50'	50'	50'	50'
Barn, Animal	—	—	—	—	—	50'
Barn Gutter	None** (25/18)**	25'	25'	25'	25'	50'
Building Overhang (from centerline of well)	2'	2'	2'	2'	2'	None ^
Cemetery Grave Sites	None*	100'	100'	50'	50'	50'
Cistern	10'	10'	10'	8'	8'	8'
Coal Storage (greater than 500 tons)	None*	None*	None*	1,200'	1,200'	1,200'
Composting Site (See Solid Waste Processing Facility)	None	None	None	None	250'	250'
Culvert, stormwater	None	None	None	None	None	8'
Discharge to ground from a Water Treatment Device	None	None	None	25'	25'	None
Ditch—Edge of	None	None	None	None	25'	8'
Doghouse or kennel housing 5 or fewer adult pets on residential lot	None	None	None	50'	8'	8'
Downspout Outlet (Rainwater, including the discharge therefrom)	10'	10'	10'	8'	8'	None
Drain — Sanitary building (having pipe conforming to ch. SPS 384) (Buried)	10'	8'	8'	8'	8'	8'

Source	Prior to@ Oct. 1975	Oct. 1975 to Oct. 1981	Oct. 1981 to Jan. 1991	Feb. 1991 to Oct. 1994	Oct. 1994	After Oct. 1, 2014
Drain — Sanitary building (not having pipe conforming to ch. SPS 384) (Buried)	10'	25'	25'	25'	25'	25'
DRAIN (any material) (Buried)						
— Clear Water Drain	10'	10'	10'	8'	8'	None
— Building–Foundation Drain	10'	10'	10'	8'	8'	None
— Building–Foundation Drain — Sewer Connected	15'	15'	15'	8'	8'	None
Drillhole used for the underground placement of any waste, surface water or any substance as defined in s. 160.01 (8), Stats.	None	None	None	None	100'	100'
Fertilizer or Pesticide Storage Tank (any size, surface or buried) (This distance applies only for nonpotable wells)	None	None	None	8'	8'	8'
Fertilizer or Pesticide, any size Buried Storage Tank or surface tank >1,500 gal (This distance applies only for potable wells)	None	None	None	100'	100'	100'
Filter Strip	None	None	None	50'	50'	50'
Fuel Oil Tank — Buried	None*	100'	100'	100'	100'	100'
		(25' Allowed for Private Res. Lots Only)	(25' Allowed for Private Res. Lots Only)	(Including any associated buried piping) (25' allowed for tanks serving single family residences)	(Including any associated buried piping) (25' allowed for tanks serving single family residences)	(Including any associated buried piping) (25' allowed for tanks serving single family residences)
Fuel Oil Tank Serving a Single Family Residence	None	25' Allowed for Private Res. Lots Only	25' Allowed for Private Res. Lots Only	25'	25'	25' (Including any associated piping)
Fuel Oil Tank—Surface (>1,500 gallons) (including any associated piping)	None*	None*	None*	100'	100'	100' (Including any associated piping)
Fuel Oil Tank—Surface (<1,500 gallons)	None*	None*	None*	None*	None*	25'
Fertilizer or Pesticide (Dry) Storage Area or Building (more than 100 pounds)	None	None	None	None	100'	100'
Gasoline or Other Petroleum or Liquid Product Tank — Buried (Does not apply to separation distance between Liquid Propane tanks and wells serving single family residences)	None*	100'	100'	100' (Including any associated buried piping)	100' (Including any associated buried piping)	100' (Including any associated piping)
Gasoline or Other Petroleum or Liquid Product Tank — Surface (< 1,500 gallons, including any associated buried piping)	None	None	None	None	None	25'
Gasoline or Other Petroleum or Liquid Product Tank — Surface (>1,500 gallons, including any associated piping)	None*	None*	None*	100'	100'	100'
Glass Lined Feed Storage Facility (Harvester–Type Silos)	None**	25'	25'	50'	50'	50'
Grease Interceptor (Trap) (Buried)	25'	25'	25'	25'	25'	25'
Hazardous Waste Treatment Facility Regulated by DNR	None*	None*	None*	1,200'	1,200'	1,200'
Heat exchange drillhole	None	None	None	None	None	None
Holding Tank (Wastewater) (Also known as a POWTS holding component)	None	25'	25'	25'	25'	25'
Infiltration basin or system, Stormwater	None	None	None	None	100'	100'
Junkyard or Scrap Yard	None	None	None	250'	250'	250'
Kennel on residential lot enclosing 5 or fewer adult pets	None	None	None	50'	8'	8'
Kennel, other than above	None	None	None	50'	50'	50'
Lagoon, Treatment (See liquid waste disposal system)	—	—	—	—	—	—
Lake Shoreline (Measured to the edge of the floodway)	None*	25'	25'	25'	25'	25'
			(60' For Schools and High Cap. Wells)			
Landfills (existing, proposed or abandoned) (Distance to Nearest Fill Area of abandoned landfills if Known; Otherwise to the Property Line)	None*	400 yards	400 yards	1,200'	1,200'	1,200'
Lift Station##	—	—	—	##	100'	100'
Liquid Propane (L.P.) gas tank (buried) (Applies only to wells serving a single family residence. For other wells see NR 812.04 (4) (d)1.)	None	None	None	None	None	8'
Liquid Waste Disposal System	None	250'	250'–300'	250'#	250'#	250'#
Manure Hopper or Reception Tank — Liquid–Tight	None*	75'	75'–150'	50'	50'	50'
Manure Loading Area	None	None	None	None	50'	50'
Manure Stack, — Temporary	None	100'	100'	250'	150'	150'

Source	Prior to@ Oct. 1975	Oct. 1975 to Oct. 1981	Oct. 1981 to Jan. 1991	Feb. 1991 to Oct. 1994	Oct. 1994	After Oct. 1, 2014
Manure — Storage Structure (Earthen, Excavated or Non-liquid tight)	None*	250'	250'–300'	250'***	250'***	250'***
Manure Storage Structure (Fabricated, Liquid-Tight)	None*	100'	100'–175'	100'	100'	100'
Manure — Storage Basin — Liquid-Tight Concrete Floor with an Acceptable Drainage Facility	None*	100'	150'–300'	Now in category of Manure Storage Structure	Now in category of Manure Storage Structure	Now in category of Manure Storage Structure
Milk house drain outlet	None**	None**	None**	None**	None**	50'
Mound System (Measured to the toe of the mound) (Also known as POWTS dispersal component.)	50'	50'	50'	50'	50'	50'
Nonpotable Well	None*	None*	None*	8'	8'	8'
Pesticide or Fertilizer (Dry) Storage Area or Building (More than 100 Pounds)	None	None	None	None	100'	100'
Pesticide or Fertilizer Storage Tank (not buried) — less than 1,500 gallons (this distance applies only for non-potable wells)	None	None	None	8'	8'	8'
Pesticide or Fertilizer Storage Tank — Buried tank, any size, or any surface tank >1,500 gal (this distance applies only for potable wells)	None	None	None	100'	100'	100'
Pet Waste Pit Disposal Unit	None*	50'	50'	50'	50'	50'
Pet animal shelter or kennel on residential lot and housing not more than 5 adult pets.	None	None	None	50'	8'	8'
Pet animal shelter or kennel housing more than 5 adult pets or not on residential lot.	None	None	None	50'	50'	50'
Petroleum Product Tank — Surface — less than 1,500 gallons capacity	None*	None*	None*	None*	None*	25'
Petroleum Product Tank —Surface — greater than or equal to 1,500 gallons capacity	None*	None*	None*	None*	None*	100'
Pits — Noncomplying	None	10'	10' (20' For Schools, WWTP's, and High Capacity — Including Approved Pits)	8'	8'	8'
Plastic Silage Storage and Transfer Tube	None	None	None	8'	8'	8'
Pond (Measured to nearest high water edge)	None	None	None	None	None	25'
Pond, Stormwater detention (Edge of)	None	None	None	None	25'	25'
Pond, synthetically-lined decorative yard pond on a residential lot	—	—	—	—	—	None
Pond, treatment (See liquid waste disposal system)	—	—	—	—	—	—
POWTS holding component (Also known as a holding tank.)	25'	25'	25'	25'	25'	25'
POWTS treatment component (Includes septic tanks, aerobic treatment units or filters)	25'	25'	25'	25'	25'	25'
POWTS dispersal component (Also known as a soil absorption unit or mound.)	50'	50'	50'	50'	50'	50'
Privy (Also known as pit privy)	50' (Sewage Disposal Units)	50'	50'	50'	50'	50'
Quarry (See s. NR 812.12 (16) for well construction requirements for wells to be constructed within 500 feet of a quarry.)	—	—	—	###	###	500'
Recycling Facility	None	None	None	None	None	100'
Reservoir — Noncomplying (Cistern)	10'	10'	10'	8'	8'	8'
Ridge and Furrow System (See liquid waste disposal system)						
River or Stream Edge (Measured to the edge of the floodway)	None*	25'	25' (60' For Schools and High Cap. Wells)	25'	25'	25'
Salt or Deicing Material Storage Area (Including structure and area surrounding where material is transferred to vehicles) (This category includes sand & salt mixtures if salt content of mixture is 5% or more)	None*	None*	None*	250'	250'	250'

Source	Prior to@ Oct. 1975	Oct. 1975 to Oct. 1981	Oct. 1981 to Jan. 1991	Feb. 1991 to Oct. 1994	Oct. 1994	After Oct. 1, 2014
Salvage Yard	None*	None*	None*	250'	250'	250'
Scrap Metal Processing Facility	None	None	None	None	None	100'
Septage Landspreading Area	None	None	None	None	None	25'
Note: Not a requirement—only a recommendation						
Septic Tank (Also known as a POWTS treatment component)	25'	25'	25'	25'	25'	25'
SEWER (ch. SPS 384 Materials) (Buried)						
—Manure/Gravity sewer	8'	8'	8'	25'	25'	25'
—Manure/Pressurized sewer	8'	8'	25'	25'	25'	25'
—Sanitary Building/Gravity sewer	8'	8'	8'	8'	8'	8'
—Sanitary Building/Pressurized sewer	8'	25'	25'	25'	25'	25'
—Sanitary Collector sewer ^o (Serving ≤ 4 living units or ≤ 6" diameter)	8'	50'	50'	50'	25'	25'
—Sanitary Collector sewer ^o (Serving > 4 living units or > 6" diameter)	8'	50'	50'	50'	50'	50'
—Influent sewer	50'	50'	50'	50'	50'	50'
—Storm Collector sewer (≤ 6" diameter)	8'	50'	50'	50'	25'	25'
—Storm Collector sewer (> 6" diameter)	8'	50'	50'	50'	50'	50'
SEWER (not ch. SPS 384 Materials) (Buried)						
—Manure/Gravity sewer	25'	25'	25'	25'	25'	25'
—Manure/Pressurized sewer	25'	50'	50'	50'	50'	50'
—Sanitary Building/gravity sewer	25'	25'	25'	25'	25'	25'
—Sanitary Building/Pressurized sewer	25'	25'	25'	25'	50'	50'
—Storm Building sewer	25'	25'	25'	25'	8'	None
—Sanitary Collector sewer ^o	25'	50'	50'	50'	50'	50'
—Storm Collector sewer	25'	50'	50'	50'	50'	8'
—Influent sewer	50'	50'	50'	50'	50'	50'
Shoreline—Lake, River or Stream [Measured as indicated in subd. (4) (b) 7.]	None*	25'	25'	25'	25'	25'
			(60' For Schools and High Capacity Wells)			
Silage Storage, Earthen Trench or Pit	None*	100'	100' – 175'	250'	250'	250'
Silage Storage Structure (Fabricated liquid-tight) (In- ground or surface)	None	None	None	None	100'	100'
Silage Storage — Surface, Uncovered	None	None	None	None	100'	100'
Silage Storage Tube (Plastic)	None	None	None	8'	8'	50'
Silo With Pit	None**	50'	50'	50'	50'	50'
Silo Without Pit But With Concrete Floor and Drain	None**	25'	25'	50'	50'	50'
Single application landspreading of petroleum- contaminated soil	—	—	—	—	250'	250'
Sludge Drying Bed, Liquid-tight	None	None	None	None	None	100'
Sludge Landspreading or Drying Area	None*	200'	200'	250'	250'	25'
Note: Not a requirement—only a recommendation						
Soil Absorption Unit (<12,000 gal/day, includes alternate unit) (Also known as POWTS dispersal component)	50'	50'	50' (200' for schools as of 1978)	50' (200' for schools)	50' (200' for schools)	50' (200' for schools)
Soil Absorption Unit (≥12,000 gal/day, existing or aban- doned) (Also known as POWTS dispersal component)	50'	50'	50' (200' for schools as of 1978)	250'	250'	250'
Solid Waste Processing Facility (Including composting facilities)	None	None	None	None	250'	250'
Solid Waste Site (See Landfill)						
Solid Waste Transfer Facility	None	None	None	None	250'	250'
Spray Irrigation Waste Disposal Site (See liquid waste disposal system)						
Stormwater detention pond or basin	None	None	None	None	25'	25'
Stormwater infiltration basin or system	None	None	None	None	100'	100'
Sump — Clear water	None	None	None	8'	8'	None
Sump—Wastewater (Watertight) (formerly cast-iron equivalent)	None*	8'	8'	25'	25'	8'
Sump—Wastewater (not watertight or equivalent to cast iron)	None*	25'	25'	25'	25'	25'
Swimming Pool (from edge of water)	None*	25' (Below ground)	25' (Below ground)	25' (Below ground)	8' (above or below ground)	8' (above or below ground)
Temporary Manure Stack	None	100'	100'	250'	150'	150'

Source	Prior to@ Oct. 1975	Oct. 1975 to Oct. 1981	Oct. 1981 to Jan. 1991	Feb. 1991 to Oct. 1994	Oct. 1994	After Oct. 1, 2014
Vegetated Treatment Area (Previously known as a Filter Strip) Waste Disposal Site (See Landfill)	None	None	None	50'	50'	50'
Wastewater Treatment Plant Effluent Pipe	None	None	None	50'	50'	50'
Wastewater Treatment Plant Structure, Conveyance or Treatment Unit	None*	None	150'	100'	100'	100'
Well or drillhole used for underground placement of any waste, surface water or any substance as defined in s. 160.01, Stats.	None	None	None	None	100'	100'
Yard Hydrant	None	10'	10'	8'	8'	None, but not allowed to be installed in or on well

^ The department recommends that a well be separated from any adjacent building such that the centerline of the well, extended vertically, will clear any projection of the building by not less than two feet.

° The minimum separating distance between a well and a collector sewer serving more than 4 living units or larger than 6 inch diameter is 50 feet regardless of whether the well or the sewer was installed first.

* "None" Although there were no minimum separation distances required by the code between these possible sources of contamination and a well or reservoir prior to 1975, and in some cases, prior to 1981, it is strongly recommended that the present standard minimum separation distance requirements be met whenever possible.

** Distances were developed under the Public Health Service Grade A Milk Ordinance and have been used by the department of agriculture, trade and consumer protection field inspectors.

*** Variances from these separating distances may be granted for earthen manure storage and temporary manure stacks meeting specifications of Soil Conservation Service Standards No. 425 and 312, respectively.

Variances from this minimum separating distance may be granted for treatment ponds or for storage or treatment lagoons constructed and maintained to the requirements of an approval granted under ch. NR 213.

After Feb. 1, 1991 and prior to October 1, 1994 the minimum separating distance between a well or reservoir and a lift station is based on the presence of a sewer force main at the lift station.

Between Feb. 1, 1991 and October 1, 2014, NR 812.12 (16) required that when a quarry was located within 1200 feet of any proposed well, the upper enlarged drillhole and well casing pipe depth requirements were to be referenced from the bottom of the quarry. Effective October 1, 2014, NR 812.12 (16) states the requirements for when a quarry is located within 500 feet of any proposed water well.

@@ While there is no minimum separation distance requirement between a potable well and a heat exchange drillhole, if the construction or operation of a geothermal heat exchange drillhole system adversely affects the operation of any private wells on neighboring properties, the department approval of the geothermal heat exchange drillhole system will not negate the protection to which private well owners are entitled under Wisconsin case law relating to groundwater. The department approval also does not relieve the well driller, property owner or geothermal heat exchange drillhole system operator of any liability which may result from injury or damage suffered by any person upon operation of the geothermal heat exchange drillhole system. (This means that if a nearby property owner can demonstrate that their water supply well has been adversely affected by the construction or operation of the geothermal heat exchange drillhole system, there is case-law precedent that would help support a claim brought by a neighbor to try to mitigate any negative impacts caused by the construction or operation of the system. The injured party may seek relief under the modified reasonable use doctrine set forth in *State of Wisconsin v. Michels Pipeline Construction, Inc.*, 63, Wis. 2nd, 278 (1974).

@ There are several code revisions prior to 1975. The dates of these revisions and the minimum separating distances were as follows:

Contamination Source	April 24, 1936	March 1939	July 1951	April 10, 1953	May 1, 1971
Building Overhang	2'	2'	2'	2'	2'
Cistern	None	None	10'	10'	10'
Downspout	None	None	10'	10'	10'
Drain					
— Building Foundation	10'	10'	10'	10'	10'
— Sewer Connected Building Foundation	10'	10'	15'	15'	15'
— Clear Water	None	None	10'	10'	10'
— Cast Iron (With Lead Joints)	10'	10'	10'	10'	10'
Grease Trap (Watertight)	None	None	25'	25'	25'
Septic Tank	None	None	25'	25'	25'
Sewage Disposal Unit (Absorption Field)	None	None	50'	50'	50'
Sewer					
—Cast Iron (With Lead Joints)	10'	10'	8'	8'	8'
—Not Cast Iron or equivalent	25'	25'	25'	25'	25'

(5) HEAT EXCHANGE DRILLHOLE SEPARATION DISTANCES. Minimum separation distances between any heat exchange drillhole, water supply wells, and existing sources of contamination; or between new sources of contamination and existing heat exchange drillholes shall be maintained as described in this subsection. Separation distance requirements to possible sources of

contamination will not be waived because of property lines. Minimum separating distances are ten feet between a heat exchange drillhole and each of the following:

- (a) Non-municipal water supply well.
- (b) Onsite waste disposal system.
- (c) Buried fuel storage tank.

History: Cr. Register, January, 1991, No. 421, eff. 2-1-91; am. (1) (b) 1., (2) (a) to (c), (4) (a) 5., 9., 12. and 13., (b) 1., 5., 7., 11. and 13., (c) 10. to 13., (d) 1. to 3., (f) 6. to 8., (g) 1. and Table A, cr. (1) (e), (4) (a) 14. and 15., (b) 14. and 15., (c) 14. and 15., (d) 4. to 9. and (ee), r. (4) (b) 8., Register, September, 1994, No. 465, eff. 10-1-94; corrections made under s. 13.93 (2m) (b) 7., Stats., Register, September, 1994, No. 465; correction in (4) (d) 1. made under s. 13.93 (2m) (b) 7., Stats., Register, September, 1996, No. 489; cr. (4) (f) 11., am. Table A, Register, December, 1998, No. 516, eff. 1-1-99; corrections made under s. 13.93 (2m) (b) 7., Stats., Register, December, 1998, No. 516; CR 05-020: am. (4) (g) 1. Register January 2006 No. 601, eff. 2-1-06; CR 09-123: am. (4) (b) 11. Register July 2010 No. 655, eff. 8-1-10; correction in (4) (a) 1., 2., 4., (b) 4., 5., (c) 7., 10. b., 14., (d) 1., Table A made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672; CR 13-096: am. (title), (4) (intro.), cr. (5), CR 13-099: am. (1) (intro.), (b) (intro.), r. (1) (b) 1., 2., cr. (1) (f), am. (2) (a) to (c), cr. (2) (d) to (g), am. (4) (intro.), (a) 1., 2., r. (4) (a) 3. to 6., 8., am. (4) (a) 11., r. (4) (a) 13., am. (4) (a) 14., 15., cr. (4) (a) 16. to 18., am. (4) (b) 2. to 4., 7., r. (4) (b) 9., 10., am. (4) (b) 12., r. (4) (b) 13., am. (4) (b) 15., cr. (4) (b) 16., am. (4) (c) 1., 2., 4., renum. (4)

(c) 10. (intro.) to 10. and am., r. (4) (c) 10. a., b., cr. (4) (c) 16. to 20., am. (4) (d) 1., 4., 6., cr. (4) (d) 10. to 12., am. (4) (f) 2., 7., 8., cr. (4) (fm), am. Table A Register September 2014 No. 705, eff. 10-1-14; correction in (4) made under s. 35.17, Stats., Register September 2014 No. 705; 2015 Wis. Act 197 s. 43 Register April 2016 No. 724.

NR 812.09 Department approvals. (1) REVIEW PERIOD. Unless another time period is specified by law, the department shall complete its review and make a determination on all applications for licenses or approvals within 65 business days after receipt of a complete application. Incomplete applications will be returned. The start of the 65 day review period will not begin until a complete application is received by the department. All requests for approval shall be in writing, except that for situations that require immediate response, an approval may be requested verbally and an advanced verbal approval may be granted by the department and followed up with a written confirmation.

(2) APPROVAL APPLICATION AND SUBMISSION. The property owner or lessee shall obtain a written approval from the department. When an application is submitted by someone other than the owner of the subject property, the owner or authorized agent shall sign the application. Application information, outlines or forms may be obtained from the department. Applications shall provide information regarding the owner's and operator's name, address and firm name, if applicable, and any other information requested by the department. The department may request, but is not limited to descriptions or sketches of well construction, geology, pump installation, plumbing, possible contamination sources, property boundary, water use and, water sample results, depending on the type of application.

(3) PLANS AND SPECIFICATION PREPARATION. Plans and specifications for a school water system shall be submitted by a registered professional engineer or well driller for wells, and by a registered professional engineer or pump installer for pumps, discharge piping, storage tanks and controls. Plans and specifications for a wastewater treatment plant water system shall be submitted by a registered professional engineer, by a well driller for the well or a pump installer for the pump. If construction or installation of a water system described in this subsection has not commenced within 2 years of approval date, the approval is void.

(4) APPROVALS REQUIRED. Prior department approval is required for the activities described in this subsection. When deemed necessary and appropriate for the protection of public safety, safe drinking water and the groundwater resource, the department may specify more stringent well and heat exchange drillhole locations, well and heat exchange drillhole construction or pump installation specifications for existing and proposed high capacity, school or wastewater treatment plant water systems requiring approval by this subsection or water systems approved by variance. Approval by the department does not relieve any person of any liability which may result from injury or damage suffered by any other person. In addition, failure to comply with any condition of an approval or the construction, reconstruction or operation of any well or water system in violation of any statute, rule or department order shall void the approval. Approval is required for:

(a) The construction, reconstruction, or operation of a high capacity well or well system, including dewatering wells. An application for a high capacity well or well system approval shall include, for every well, the location, construction or reconstruction features, pump installation features, the proposed rate of operation and the distance to nearby public utility wells, as defined in s. 196.01, Stats.

1. The department may deny approval, grant a limited approval or modify an approval under which the location, depth, pumping capacity or rate of flow and ultimate use is restricted so that the supply of water for any public utility, as defined by s. 196.01, Stats., will not be impaired. Reduced availability of groundwater to a public utility well may be indicated when calculations using estimated values for aquifer characteristics result in 10 or more feet of water level drawdown in the public utility well based on 30 days of continuous pumping from the proposed high capacity well or well system. The department may also deny

approval or condition an approval if the proposed or actual well location, well construction or pump installation features or the use of the well does not meet, at the time of application, the specifications of this chapter for new well construction and pump installation or water use.

2. When an owner or operator relinquishes control of the operation of a high capacity well or well system, a new approval shall be obtained by the new operator, owner or lessee before operation of the high capacity well or well system is continued.

3. The owner or operator of a high capacity well or well system shall submit pumpage and well water level reports to the department on department forms at the time periods indicated by the department.

4. Emergency approval for a high capacity well or well system may be granted when fire hazard, imminent crop damage or other similar emergency requires if the department determines that the high capacity well or well system proposed will not adversely affect or reduce the availability of water to a public utility, as defined in s. 196.01, Stats.

5. High capacity test drillholes or up to 2 geothermal heat exchange drillholes may be constructed without approval to test for aquifer yield to determine if a high capacity well, heat exchange drillhole, or well system is feasible. The well casing pipe for such test drillholes shall not exceed 6-inch diameter unless the well driller notifies the department. High capacity test drillholes may be test pumped at a rate of 70 gallons per minute or more if the test does not last more than a total of 72 hours. After testing, the drillhole shall be filled and sealed, according to the requirements of s. NR 812.26 or shall be converted, following approval, to a high capacity well, heat exchange drillhole, or well system which meets the requirements of this chapter or ch. NR 811 and of any approved plans and specifications within 90 days.

Note: *State v. Michels Pipeline Construction, Inc.*, 63 Wis.2d 278, 217 N.W.2d 339 (1974) established that the doctrine of reasonable use applies to property rights in groundwater. Persons adversely affected by the operation of a high capacity well or well system may take action against the operator or owner of the high capacity well or well system.

(b) The construction, reconstruction or operation of a school or wastewater treatment plant well or water system.

(c) Installation of water treatment devices or chemical addition to a well or water system as specified in s. NR 812.37.

(d) A variance from any provision of this chapter.

(e) The construction of a granite or other crystalline bedrock well with less than 40 feet of well casing pipe.

(f) The construction or reconstruction of a well located in designated special well casing pipe depth areas.

Note: A list of these special well casing pipe depth areas is available from the department.

(g) The construction of a well open to both an unconsolidated formation and a bedrock formation.

(h) The use of the Halliburton grouting methods or the grout displacement grouting method as described in s. NR 812.20 (3) (e), (f) and (g) for wells when the upper enlarged drillhole is more than 200 feet deep or when drilling mud or bentonite slurry has not been circulated up to the ground surface in the annular space prior to grouting.

(i) The development of a spring for use as a potable water supply as provided in s. NR 812.25.

(j) The construction or reconstruction of a pit as provided in s. NR 812.36 or in s. NR 812.42 (2).

(k) The installation of a hung well casing pipe or a hung liner.

(L) The use of well drilling aids and additives, grout, sealing or well filling and sealing materials and additives and well rehabilitation materials.

(m) The construction or reconstruction of a dug well as provided in s. NR 812.24.

(n) Well casing pipe testing procedures.

Sec. 46-50. - Time for mandatory connection.

The owner of all houses, buildings or properties used for human occupancy, business, employment, recreation or other purposes situated within the jurisdiction of the city and abutting on any street, alley or right-of-way in which there is located a public water main shall at the owner's expense connect to the public water system within one year after the date of official notice from the department of public works and utilities.

(Code 1993, § 13.33)

Sec. 46-101. - Prohibited.

No person shall establish or permit to be established or maintain or permit to be maintained any cross connection. No interconnection shall be established whereby potable water from a private, auxiliary or emergency water supply other than supply or distribution system of the municipality is interconnected with the city's water utility facilities, unless such private, auxiliary or emergency water supply and the method of connection and use of such supply shall have been approved by the city water utility and by the state department of natural resources in accordance with Wis. Admin. Code NR 810.15.

(Code 1993, § 13.36(2); Ord. No. 2012-07-05-D, § 1, 7-10-2012)

Sec. 46-529. - Coverage required.

All private wells located on any premises which is served by the public water systems of the city shall be properly filled by January 1, 1989. Only those wells for which a well operation permit has been granted by the director may be excepted from this requirement, subject to conditions of maintenance and operation.

(Code 1993, § 13.37(2))

Sec. 46-530. - Well operation permits.

A permit may be granted to a well owner to operate a well if the following requirements are met, except as otherwise provided herein:

- (1) The well and pump installation meet the requirements of Wis. Admin. Code ch. NR 812 and subsequent amendments, and a well constructor's report is on file with the DNR, or certification of the acceptability of the well has been granted by the private water supply section of the DNR.
- (2) The well has a history of producing safe water.
- (3) The proposed use of the well can be justified as being necessary in addition to water provided by the public water system.
- (4) No physical connection shall exist between the piping of the public water system and the private well.
- (5) A permit fee shall have been paid once every five years in an amount determined by annual resolution of the city council.

(Code 1993, § 13.37(3))

Sec. 52-256. - Changes and amendments.

- (a) *Authority.* Whenever the public necessity, convenience, general welfare or good zoning practice require, the city may, by ordinance, change the district boundaries or amend, change or supplement the regulations established by this chapter or amendments thereto. Such change or amendment shall be subject to the review and recommendation of the plan commission.
- (b) *Initiation.* A change or amendment may be initiated by the city council, plan commission or by a petition of one or more of the owners or lessees of property within the area proposed to be changed.
- (c) *Petitions.* Petitions for any change to the district boundaries or amendments to the regulations shall be filed with the city clerk, describe the premises to be rezoned or the regulations to be amended, list the reasons justifying the petition, specify the proposed use and have attached the following:
 - (1) A plot plan drawn to a scale of one inch equals 100 feet showing the area proposed to be rezoned, its location, its dimensions, the location and classification of adjacent zoning districts and the location and existing use of all properties within 200 feet of the area proposed to be rezoned.
 - (2) Names and addresses of owners of all properties lying within 200 feet of the area proposed to be rezoned.
 - (3) Additional information required by the plan commission or city council.
 - (4) Fee receipt from the city treasurer in the amount set by resolution of the city council.
- (d) *Recommendations.* The plan commission shall review all proposed changes and amendments within the corporate limits and shall recommend that the petition be granted as requested, modified or denied. The recommendation shall be made at a meeting subsequent to the meeting at which the petition is first submitted and shall be made in writing to the city council. The plan commission shall review all proposed changes and amendments within the zoning jurisdiction and shall vote on the matter within its jurisdiction.
- (e) *Hearings.* The planning commission shall hold a public hearing upon the purposed zoning change, giving at least ten days' prior notice by publication at least three times during the preceding 30 days on consecutive weeks listing the time, place and the change or amendments proposed. The planning commission shall also give at least ten days' prior written notice to the clerk of any municipality within 1,000 feet of any land to be affected by the proposed change or amendment.
- (f) *City council's action.* Following such hearing and after careful consideration of the plan commission's recommendations, the city council shall vote on the passage of the proposed change or amendment. The plan commission's recommendations may be overruled only by three-fourths of the full membership of the city council.
- (g) *Protest.* In the event of a protest against such district change or amendment to the regulations of this chapter, signed and acknowledged by the owners of 20 percent or more of land immediately adjacent extending 100 feet therefrom, or by the owners of 20 percent of the land directly opposite thereto extending 100 feet from the street frontage of such opposite land, such changes or amendments shall not become effective except by the favorable vote of three-fourths of the full city council.

(Code 1993, § 17.81; Ord. No. 2007-09-08-C, § 11, 9-10-2007)

Attachment C Title Commitment Documents

**DATE DOWN (OWNER)
ENDORSEMENT**

Attached to and forming a part of
Owners Policy No. 72106-73100282
(Agent Case No. 05MO26513)

Issued By
CHICAGO TITLE INSURANCE COMPANY

1. Schedule A is hereby amended as follows:
 1. The Date of Policy is hereby extended to: April 20, 2018 at 4:30 P.M.
 2. The estate or interest in Schedule A is at the extended effective Date of Policy vested in: City of Tomah
 3. The description of the mortgage in Schedule A is hereby amended to include the following: NONE

2. Schedule B is hereby amended as follows:
 1. Exception No. 1 of Schedule B is hereby amended to read as follows:
General taxes for the year 2018, not yet due and payable.
 2. The following is added as an Exception under Schedule B:

Environmental Protection Easement and Declaration of Restrictive Covenants
executed by and between the City of Tomah, Grantor and the Wisconsin
Department of Natural Resources and International Paper Company, Grantee by
an instrument dated Jan. 20, 2006 and recorded in the Office of the Register of
Deeds for Monroe County, Wisconsin on April 3, 2006 at 10:15 AM as Document
No. 559942.

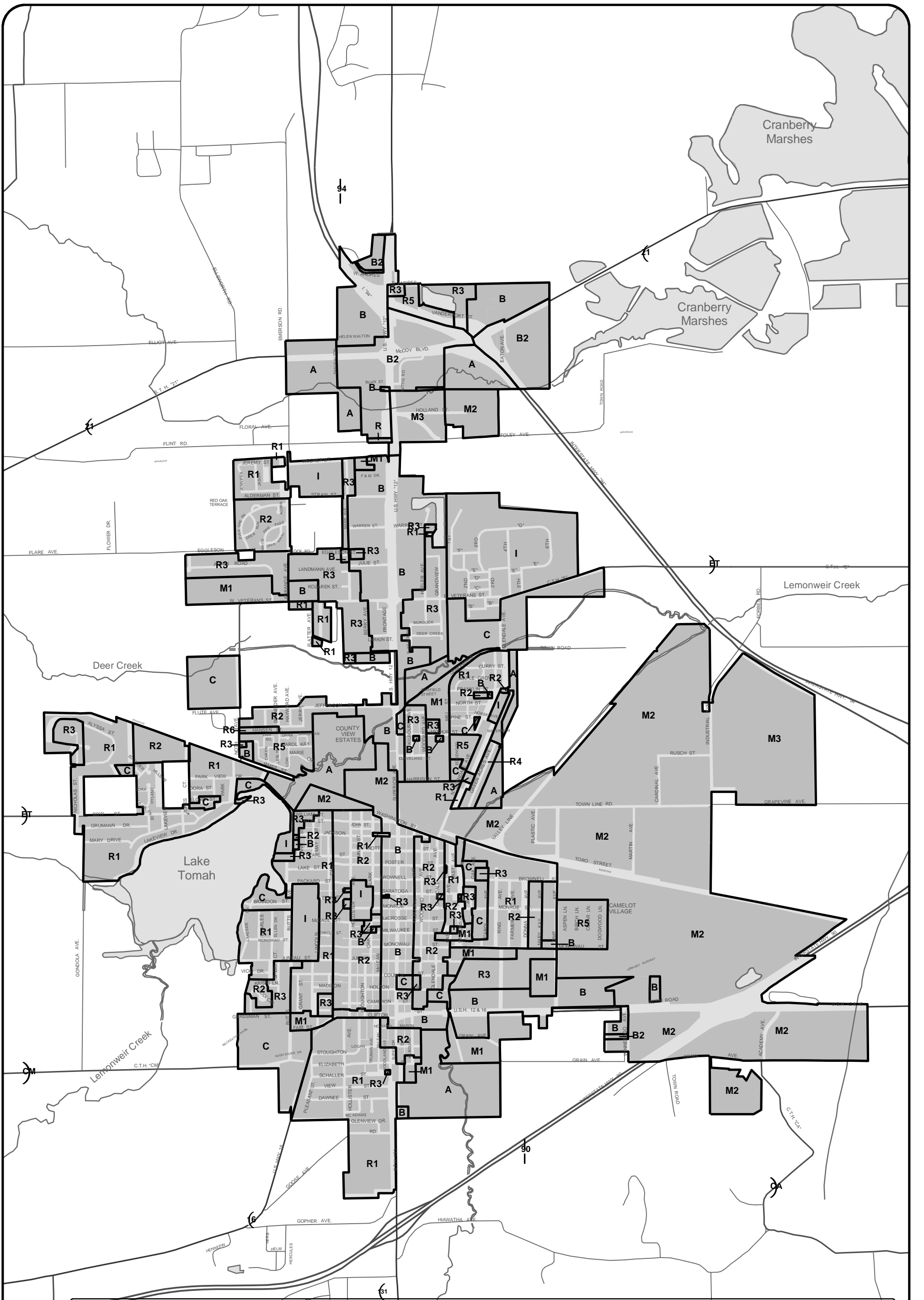
This endorsement is issued as part of the policy. Except as it expressly states, it does not (i) modify any of the terms and provisions of the policy, (ii) modify any prior endorsements, (iii) extend the Date of Policy, or (iv) increase the Amount of Insurance. To the extent a provision of the policy or a previous endorsement is inconsistent with an express provision of this endorsement, this endorsement controls. Otherwise, this endorsement is subject to all of the terms and provisions of the policy and of any prior endorsements.

Dated: April 26, 2018

CHICAGO TITLE INSURANCE COMPANY

Authorized signatory

Attachment D Zoning Maps



City of Tomah













Zoning Map

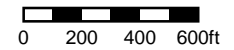
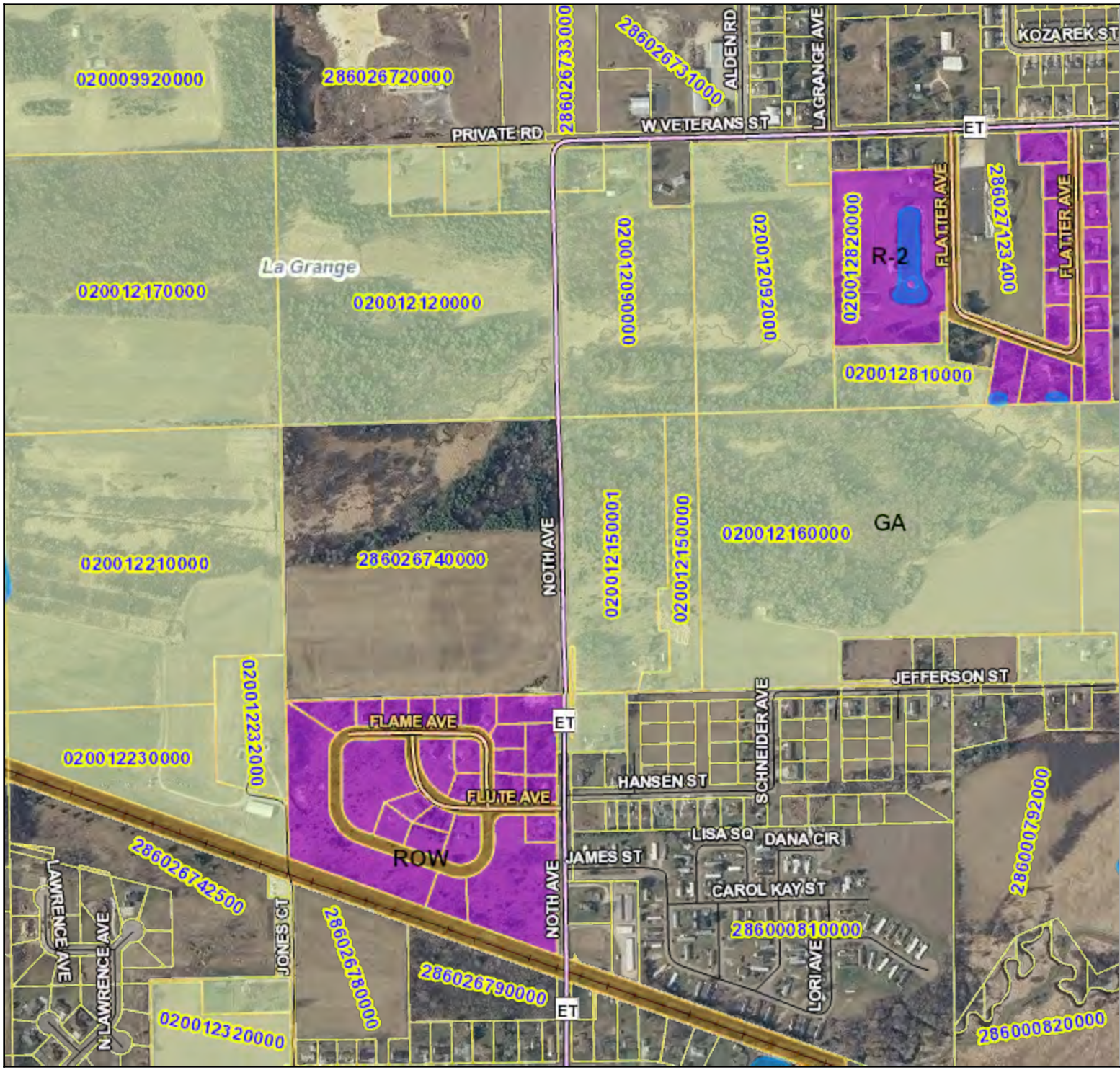
February 2005




Monroe County Zoning Around The TMSL

Legend

- County Zoning
-  B - Business
 -  C - Community
 -  ET - Extraterritorial
 -  GA - General Agriculture
 -  GF - General Forestry
 -  I - Industrial
 -  IB - Interstate Business
 -  R-1 - Urban Residential
 -  R-2 - Suburban Residential
 -  R-3 - Rural Residential
 -  W - Wilderness
 -  ROW - Right-of-Way



DISCLAIMER: This map is not guaranteed to be accurate, correct, current, or complete and conclusions drawn are the responsibility of the user.

Author:	
Date Printed: 07/29/15 1:7 PM	
Sources:	

Attachment E Notification Letters

TOMAH CITY ATTORNEY

917 SUPERIOR AVENUE
P.O. BOX 110
TOMAH, WI 54660

PENNY J. PRECOUR
CITY ATTORNEY

TELEPHONE (608) 372-2014
FACSIMILE (608) 372-2447

April 27, 2018

KAS INVESTMENTS, LLC
317 Plastic Avenue
Tomah, Wisconsin 54660

Re: *City of Tomah Landfill*

Dear Mr. Thorson:

This letter is written in regards to the on-going remediation efforts at the Tomah Municipal Sanitary Landfill Superfund Site ("SITE"). As part of the remedial action for the SITE, the Potentially Responsible Parties ("PRPs"), including the City of Tomah and International Paper, have been investigating the potential for groundwater contamination at your property adjacent to the contamination plume. The PRPs have a comprehensive monitoring program and testing program to continually monitor the extent and location of the groundwater contamination plume. At present, there is no evidence to suggest that the plume has impacted your property. However, that possibility exists given the proximity of your property to the SITE.

In addition, the PRPs have been asked by the Wisconsin Department of Natural Resources (DNR) and the United States Environmental Protection Agency (EPA) to have you execute and record an Environmental Protection Easement and Declaration of Restrictive Covenants ("EASEMENT") for your property nearby the SITE. A copy of the proposed EASEMENT is enclosed. The EASEMENT is part of the Institutional Controls for the SITE. The purpose of this EASEMENT is to provide notice to future owners that a risk of groundwater contamination exists in this area. Even though you have refused to sign the Easement, you still have a legal obligation to notify future owners of this risk.

If you have any questions, please feel free to contact me directly. Thank you.

Very truly yours,

*Penny J. Precour
City Attorney*

PJP:cf

Enclosure

*cc: Mr. Roger Gorius, City Administrator (via email - w/o encl.)
Mr. Ryan Aamot, GHD (via email - w/encl.)
Mr. Philip Slowiak, International Paper (via email - w/o encl.)*

ENVIRONMENTAL PROTECTION EASEMENT
AND
DECLARATION OF RESTRICTIVE COVENANTS

COPY

Document Number

Document Title

1. This Environmental Protection Easement and Declaration of Restrictive Covenants is made this _____ day of June, 2005, by and between KAS INVESTMENTS, LLC ("Grantor"), having an address of 317 Plastic Avenue, Tomah, Wisconsin 54660, and UNITED STATES OF AMERICA, having an address of c/o U.S. Environmental Protection Agency, Region Five Administrator, 77 West Jackson Boulevard, Chicago, Illinois, 60604, and the WISCONSIN DEPARTMENT OF NATURAL RESOURCES, having an address of 1300 West Clairemont Avenue, Post Office Box 4001, Eau Claire, Wisconsin 54702-4001, ("Grantees") collectively known as the Enforcing Agency.

Recording Area

Name and Return Address

Richard A. Radcliffe
Mubarak, Radcliffe & Berry, S.C.
917 Superior Avenue
Post Office Box 110
Tomah, Wisconsin 54660-0110

WITNESSETH:

Parcel Identification Number (PIN)

2. WHEREAS, Grantor is the owner of a parcel of land located in the County of Monroe, State of Wisconsin, more particularly described on Exhibit "A" attached hereto and made a part hereof (the "Property"); and

3. WHEREAS, the Property is part of the Tomah Municipal Sanitary Landfill Superfund Site ("Site"), which the U.S. Environmental Protection Agency ("EPA"), pursuant to Section 105 of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9605, placed on the National Priorities List, set forth at 40 C.F.R. Part 300, Appendix B, by publication in the Federal Register on March 31, 1989, 54 Fed. Reg. 19, 526; and

4. WHEREAS, in a Record of Decision dated September 25, 1997, ("OU1 ROD") and in a Record of Decision dated September 24, 2003 ("OU2 ROD") (the "ROD"), the EPA Region Five (5) Regional Administrator selected a "remedial action" for the Site, which provides, in part, for the following actions; and

5. WHEREAS, the remedial action has been implemented at the Site; and

6. WHEREAS, the parties hereto have agreed 1) to grant a permanent right of access over the Property to the Grantee for the purposes of implementing, facilitating and monitoring the remedial action; and 2) to impose on the Property use restrictions as covenants that will run with the land for the purpose of protecting human health and the environment; and

THIS PAGE IS PART OF THIS LEGAL DOCUMENT - DO NOT REMOVE.

This information must be completed by submitter: document title, name & return address, and PIN (if required). Other information such as the granting clause, legal description, etc., may be placed on this first page of the document or may be placed on additional pages of the document.

WRDA Rev. 12/22/2010

7. **WHEREAS**, Grantor wishes to cooperate fully with the Grantee in the implementation of all response actions at the Site.

NOW, THEREFORE:

8. **Grant:** Grantor, on behalf of itself, its successors and assigns, in consideration of the terms of the Consent Decree in the Case of International Paper Company v. City of Tomah and United States Department of Veterans Affairs, Civil Action No. 00-C-0539-C and United States of America v. International Paper Company and City of Tomah, Civil Action No. 01-C-0693-C in the United States District Court for the Western District of Wisconsin, etc., does hereby covenant and declare that the Property shall be subject to the restrictions on use set forth below, and does give, grant and convey to the Grantee, and its assigns, with general warranties of title, 1) the perpetual right to enforce said use restrictions, and 2) an environmental protection easement of the nature and character, and for the purposes hereinafter set forth, with respect to the Property.

9. **Purpose:** It is the purpose of this instrument to convey to the Grantee real property rights, which will run with the land, to facilitate the remediation of past environmental contamination and to protect human health and the environment by reducing the risk of exposure to contaminants.

10. **Restrictions on Use:** The following covenants, conditions and restrictions apply to the use of the Property, run with the land and are binding on the Grantor:

- A. **Private Well Restrictions.** The Grantor hereby grants and conveys to the Grantee, their heirs, successors and assigns, a perpetual restriction that there shall be no private water well on the Property. All existing wells shall be abandoned. The Grantor shall not use, or permit any person to use, water from a private well for any purpose. The Grantee, or its designee, shall have and retain the right to construct, maintain and/or replace monitoring wells on the Property as deemed necessary by the Grantee from time to time.
- B. **Municipal Water Supply.** The Grantor agrees to hook up to a municipal water supply in the event there is a need for residential water service to the Property in the future.
- C. **Other Action Inconsistent with Remedial Action.** The Grantor hereby agrees not to take any other action, and to refrain from using the Property in any manner, that would interfere with or adversely affect the implementation, integrity or protectiveness of the remedial actions on the Site as described above.

11. Modification of Restrictions: The above restrictions may be modified, or terminated in whole or in part, in writing, by the Grantee. If requested by the Grantor, such writing will be executed by Grantee in recordable form.

12. Environmental Protection Easement: Grantor hereby grants to the Grantee an irrevocable, permanent and continuing right of access at all reasonable times to the Property for the purposes of:

- a) Implementing the response actions in the ROD, including but not limited to Monitored Natural Attenuation (MNA);
- b) Verifying any data or information submitted to the EPA;
- c) Verifying that no action is being taken on the Property in violation of the terms of this instrument or of any federal or state environmental laws or regulations;
- d) Monitoring response actions on the Site and conducting investigations relating to contamination on or near the Site, including, without limitation, sampling of air, water, sediments, soils and specifically, without limitation, obtaining split or duplicate samples;
- e) Conducting periodic reviews of the remedial action, including but not limited to, reviews required by applicable statutes and/or regulations; and
- f) Implementing additional or new response actions if the Grantee, in its sole discretion, determines: i) that such actions are necessary to protect the environment because either the original remedial action has proven to be ineffective or because new technology has been developed which will accomplish the purposes of the remedial action in a significantly more efficient or cost effective manner; and ii) that the additional or new response actions will not impose any significantly greater burden on the Property or unduly interfere with the then existing uses of the Property.

13. Reserved Rights of Grantor: Grantor hereby reserves unto itself, its successors and assigns, all rights and privileges in and to the use of the Property which are not incompatible with the restrictions, rights and easements granted herein.

14. Nothing in this document shall limit or otherwise affect EPA's rights of entry and access or EPA's authority to take response actions under CERCLA, the NCP or other federal law.

15. No Public Access and Use: No right of access or use by the general public to any portion of the Property is conveyed by this instrument.

16. Notice Requirement: Grantor agrees to include in any instrument conveying any interest in any portion of the Property, including but not limited to Deeds, Leases and Mortgages, a notice which is in substantially the following form:

NOTICE: THE INTEREST CONVEYED HEREBY IS SUBJECT TO AN ENVIRONMENTAL PROTECTION EASEMENT AND DECLARATION OF RESTRICTIVE COVENANTS, DATED OCTOBER ____, 2010, RECORDED IN THE PUBLIC LAND RECORDS OF THE MONROE COUNTY REGISTER OF DEEDS ON OCTOBER ____, 2010, AS DOCUMENT NO. _____, IN FAVOR OF, AND ENFORCEABLE BY, THE UNITED STATES OF AMERICA.

Within thirty (30) days of the date any such instrument of conveyance is executed, Grantor must provide Grantee with a certified true copy of said instrument and, if it has been recorded in the public land records, its recording reference.

17. Administrative Jurisdiction: The federal agency having administrative jurisdiction over the interests acquired by the United States by this instrument is the EPA.

18. Enforcement: The Grantee shall be entitled to enforce the terms of this instrument by resort to specific performance or legal process. All remedies available hereunder shall be in addition to any and all other remedies at law or in equity, including CERCLA. Enforcement of the terms of this instrument shall be at the discretion of the Grantee, and any forbearance, delay or omission to exercise its rights under this instrument in the event of a breach of any term of this instrument shall not be deemed to be a waiver by the Grantee of such term or of any subsequent breach of the same or any other term, or of any of the rights of the Grantee under this instrument.

19. Damages: Grantee shall be entitled to recover damages for violations of the terms of this instrument, or for any injury to the remedial action, to the public or to the environment protected by this instrument.

20. Waiver of Certain Defenses: Grantor hereby waives any defense of laches, estoppel or prescription.

21. Covenants: Grantor hereby covenants to and with the Grantee and its assigns, that the Grantor is lawfully seized in fee simple of the Property, that the Grantor has a good and lawful right and power to sell and convey it or any interest therein, that the Property is free and clear of encumbrances, except those noted on Exhibit "B" attached hereto, and that the Grantor will forever warrant and defend the title thereto and the quiet possession thereof.

22. Notices: Any notice, demand, request, consent, approval or communication that either party desires or is required to give to the other shall be in writing and shall either be served personally or sent by first class mail, postage prepaid, addressed as follows:

To Grantor:

KAS Investments, LLC
317 Plastic Avenue
Tomah, Wisconsin 54660

To Grantee:

U.S. Environmental Protection Agency
Region Five Administration
77 West Jackson Boulevard
Chicago, Illinois 60604

and

Wisconsin Department of Natural Resources
1300 West Clairemont Avenue
Post Office Box 4001
Eau Claire, Wisconsin 54702-4001

23. General Provisions:

a) Controlling Law: The interpretation and performance of this instrument shall be governed by the laws of the United States or, if there are no applicable federal laws, by the law of the state where the Property is located.

b) Liberal Construction: Any general rule of construction to the contrary notwithstanding, this instrument shall be liberally construed in favor of the Grantee to effect the purpose of this instrument and the policy and purpose of CERCLA. If any provision of this instrument is found to be ambiguous, an interpretation consistent with the purpose of this instrument that would render the provision valid shall be favored over any interpretation that would render it invalid.

c) Severability: If any provision of this instrument, or the application of it to any person or circumstance, is found to be invalid, the remainder of the provisions of this instrument, or the application of such provisions to persons or circumstances other than those to which it is found to be invalid, as the case may be, shall not be affected thereby.

d) Entire Agreement: This instrument sets forth the entire agreement of the parties with respect to rights and restrictions created hereby, and supersedes all prior discussions, negotiations, understandings or agreements relating thereto, all of which are merged herein.

e) No Forfeiture: Nothing contained herein will result in a forfeiture or reversion of Grantor's title in any respect.

f) Joint Obligation: If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

g) Successors: The covenants, terms, conditions and restrictions of this instrument shall be binding upon, and inure to the benefit of, the parties hereto and their respective personal representatives, heirs, successors and assigns and shall continue as a servitude running in perpetuity with the Property. The term "Grantor", wherever used herein, and any pronouns used in place thereof, shall include the persons and/or entities named at the beginning of this document, identified as "Grantor" and their personal representatives, heirs, successors and assigns. The term "Grantee", wherever used herein, and any pronouns used in place thereof, shall include the persons and/or entities named at the beginning of this document, identified as "Grantee" and their personal representatives, heirs, successors and assigns. The rights of the Grantee and Grantor under this instrument are freely assignable, subject to the notice provisions hereof.

h) Termination of Rights and Obligations: A party's rights and obligations under this instrument terminate upon transfer of the party's interest in the Easement or Property, except that liability for acts or omissions occurring prior to transfer shall survive transfer.

i) Captions: The captions in this instrument have been inserted solely for convenience of reference and are not a part of this instrument and shall have no effect upon construction or interpretation.

j) Counterparts: The parties may execute this instrument in two or more counterparts, which shall, in the aggregate, be signed by both parties; each counterpart shall be deemed an original instrument as against any party who has signed it. In the event of any disparity between the counterparts produced, the recorded counterpart shall be controlling.

TO HAVE AND TO HOLD unto the United States and its assigns forever.

IN WITNESS WHEREOF, Grantor has caused this Agreement to be signed in its name.

Executed this _____ day of _____, 2011.

GRANTOR:
KAS INVESTMENTS, LLC

By: _____
Peter Thorson, Officer

STATE OF WISCONSIN)
)ss.
COUNTY OF MONROE)

On this _____ day of _____, 2011, before me, the undersigned, a Notary Public in and for the State of Wisconsin, duly commissioned and sworn, personally appeared, the Grantor, Peter Thorson, that executed the foregoing instrument and acknowledged the said instrument to be the free and voluntary act and deed of said Grantor, for the uses and purposes therein mentioned, and on oath stated that they are authorized to execute said document.

Witness my hand and official seal hereto affixed the day and year written above.

Richard A. Radcliffe
Notary Public, Monroe County, Wisconsin
My Commission is Permanent.

This Easement is accepted this _____ day of _____, 2011.

UNITED STATES OF AMERICA

the persons and/or entities named at the beginning of this document, identified as Grantor and their personal representatives, heirs, successors and assigns.

U.S. ENVIRONMENTAL PROTECTION AGENCY

By: _____

This Easement is accepted this _____ day of _____, 2011.

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

the persons and/or entities named at the beginning of this document, identified as Grantor and their personal representatives, heirs, successors and assigns.

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

By: _____

Attachments: Exhibit A - Legal description of the Property
 Exhibit B - List of permitted title encumbrances

EXHIBIT "A"

Legal Description

2008 Property Record | Monroe County, WI

Assessed value not finalized after Board of Review Year marked with * has not yet been developed

Property Information is valid as of 10/25/08

Owner Natl Investment Co 317 Maple Ave Tomah WI 54660				Co-Owner(s) No co-owners listed																																											
Property Information Parcel ID: 020-01304-0000 School District: Vernon School Dist				Property Description Part Of The S1/4 N1/4 & S1/4 N1/4 Bldg Lot 2 Of 17ac27																																											
Section 33 Township LN Range SW Sec. Dist. SW Lot 2 Block 1705027				Property Address No address listed Map(s) Vernon School Dist																																											
Tax Information Net Tax Before Credits: 163.91 Military Credit: .00 First Dollar Credit: .00 Net Tax After: 163.91				Deed Information Volume: 404K Page: 324K Record #: 81 114K 119 462180																																											
Net Tax After Tax Amt. Date 163.91 .00 Special Assessment .00 Special Charges .00 Disposition Charges .00 Wooded Tax .00 Private Forest Crop .00 Homestead Forest Land .00 Property Tax Interest .00 Special Tax Interest .00 Other Charges .00 Total: 163.91 Over Payment: .00				Land Valuation <table border="1"> <thead> <tr> <th>Tax Code</th> <th>Area</th> <th>Value</th> <th>Improvements</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>G3</td> <td>1.000</td> <td>300.00</td> <td></td> <td>300.0</td> </tr> <tr> <td>GSM</td> <td>3.340</td> <td>7600.00</td> <td></td> <td>7600.0</td> </tr> <tr> <td>G4</td> <td>18.000</td> <td>1100.00</td> <td></td> <td>1200.0</td> </tr> <tr> <td colspan="4">Total Acres:</td> <td>21.340</td> </tr> <tr> <td colspan="4">Assessment Ratio:</td> <td>0.8178</td> </tr> <tr> <td colspan="4">MIL RATE:</td> <td>0.019156417</td> </tr> <tr> <td colspan="4">FAV Market Value:</td> <td>816,161.97464</td> </tr> </tbody> </table>				Tax Code	Area	Value	Improvements	Total	G3	1.000	300.00		300.0	GSM	3.340	7600.00		7600.0	G4	18.000	1100.00		1200.0	Total Acres:				21.340	Assessment Ratio:				0.8178	MIL RATE:				0.019156417	FAV Market Value:				816,161.97464
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Payment History (Posted Payments) Date Recd. # Source Type Amount Sec. Tax Balance Sec. Assessment Balance Interest Penalty Total				Tax Payments Period 1, End Date 01/31/2009, Amount 93.45, Period 2, End Date 07/31/2009, Amount 93.45																																											

EXHIBIT "B"

Permitted Encumbrances

TOMAH CITY ATTORNEY

917 SUPERIOR AVENUE
P.O. BOX 110
TOMAH, WI 54660

PENNY J. PRECOUR
CITY ATTORNEY

TELEPHONE (608) 372-2014
FACSIMILE (608) 372-2447

April 27, 2018

MANAGED INVESTMENTS, LLC
317 Plastic Avenue
Tomah, Wisconsin 54660

Re: City of Tomah Landfill

Dear Mr. Thorson:

This letter is written in regards to the on-going remediation efforts at the Tomah Municipal Sanitary Landfill Superfund Site ("SITE"). As part of the remedial action for the SITE, the Potentially Responsible Parties ("PRPs"), including the City of Tomah and International Paper, have been investigating the potential for groundwater contamination at your property adjacent to the contamination plume. The PRPs have a comprehensive monitoring program and testing program to continually monitor the extent and location of the groundwater contamination plume. At present, there is no evidence to suggest that the plume has impacted your property. However, that possibility exists given the proximity of your property to the SITE.

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The EASEMENT is part of the Institutional Controls for the SITE. The purpose of this EASEMENT is to provide notice to future owners that a risk of groundwater contamination exists in this area. Even though you have refused to sign the Easement, you still have a legal obligation to notify future owners of this risk.

If you have any questions, please feel free to contact me directly. Thank you.

Very truly yours,

Penny J. Precour
City Attorney

PJP:cf

Enclosure

cc: Mr. Roger Gorius, City Administrator (via email - w/o encl.)
Mr. Ryan Aamot, GHD (via email - w/encl.)
Mr. Philip Slowiak, International Paper (via email - w/o encl.)

COPY

ENVIRONMENTAL PROTECTION EASEMENT
AND
DECLARATION OF RESTRICTIVE COVENANTS

Document Number

Document title

1. This Environmental Protection Easement and Declaration of Restrictive Covenants is made this _____ day of June, 2005, by and between **MANAGED INVESTMENTS, INC** ("Grantor"), having an address of 317 Plastic Avenue, Tomah, Wisconsin 54660, and **UNITED STATES OF AMERICA**, having an address of c/o U.S. Environmental Protection Agency, Region Five Administrator, 77 West Jackson Boulevard, Chicago, Illinois, 60604, and the **WISCONSIN DEPARTMENT OF NATURAL RESOURCES**, having an address of 1300 West Clairemont Avenue, Post Office Box 4001, Eau Claire, Wisconsin 54702-4001, ("Grantees") collectively known as the Enforcing Agency.

Recording Area

Name and Return Address

Richard A. Radcliffe
Mubarak, Radcliffe & Berry, S.C.
917 Superior Avenue
Post Office Box 110
Tomah, Wisconsin 54660-0110

WITNESSETH:

Parcel Identification Number (PIN)

2. WHEREAS, Grantor is the owner of a parcel of land located in the County of Monroe, State of Wisconsin, more particularly described on Exhibit "A" attached hereto and made a part hereof (the "Property"); and.

3. WHEREAS, the Property is part of the Tomah Municipal Sanitary Landfill Superfund Site ("Site"), which the U.S. Environmental Protection Agency ("EPA"), pursuant to Section 105 of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9605, placed on the National Priorities List, set forth at 40 C.F.R. Part 300, Appendix B, by publication in the Federal Register on March 31, 1989, 54 Fed. Reg. 19, 526; and

4. WHEREAS, in a Record of Decision dated September 25, 1997, ("OU1 ROD") and in a Record of Decision dated September 24, 2003 ("OU2 ROD") (the "ROD"), the EPA Region Five (5) Regional Administrator selected a "remedial action" for the Site, which provides, in part, for the following actions; and

5. WHEREAS, the remedial action has been implemented at the Site; and

6. WHEREAS, the parties hereto have agreed 1) to grant a permanent right of access over the Property to the Grantee for the purposes of implementing, facilitating and monitoring the remedial action; and 2) to impose on the Property use restrictions as covenants that will run with the land for the purpose of protecting human health and the environment; and

THIS PAGE IS PART OF THIS LEGAL DOCUMENT - DO NOT REMOVE.

This information must be completed by submitter: document title, name & return address, and PIN (if required). Other information such as the granting clause, legal description, etc., may be placed on this first page of the document or may be placed on additional pages of the document.

7. **WHEREAS**, Grantor wishes to cooperate fully with the Grantee in the implementation of all response actions at the Site.

NOW, THEREFORE:

8. **Grant:** Grantor, on behalf of itself, its successors and assigns, in consideration of the terms of the Consent Decree in the Case of International Paper Company v. City of Tomah and United States Department of Veterans Affairs, Civil Action No. 00-C-0539-C and United States of America v. International Paper Company and City of Tomah, Civil Action No. 01-C-0693-C in the United States District Court for the Western District of Wisconsin, etc., does hereby covenant and declare that the Property shall be subject to the restrictions on use set forth below, and does give, grant and convey to the Grantee, and its assigns, with general warranties of title, 1) the perpetual right to enforce said use restrictions, and 2) an environmental protection easement of the nature and character, and for the purposes hereinafter set forth, with respect to the Property.

9. **Purpose:** It is the purpose of this instrument to convey to the Grantee real property rights, which will run with the land, to facilitate the remediation of past environmental contamination and to protect human health and the environment by reducing the risk of exposure to contaminants.

10. **Restrictions on Use:** The following covenants, conditions and restrictions apply to the use of the Property, run with the land and are binding on the Grantor:

- A. **Private Well Restrictions.** The Grantor hereby grants and conveys to the Grantee, their heirs, successors and assigns, a perpetual restriction that there shall be no private water well on the Property. All existing wells shall be abandoned. The Grantor shall not use, or permit any person to use, water from a private well for any purpose. The Grantee, or its designee, shall have and retain the right to construct, maintain and/or replace monitoring wells on the Property as deemed necessary by the Grantee from time to time.
- B. **Municipal Water Supply.** The Grantor agrees to hook up to a municipal water supply in the event there is a need for residential water service to the Property in the future.
- C. **Other Action Inconsistent with Remedial Action.** The Grantor hereby agrees not to take any other action, and to refrain from using the Property in any manner, that would interfere with or adversely affect the implementation, integrity or protectiveness of the remedial actions on the Site as described above.

11. Modification of Restrictions: The above restrictions may be modified, or terminated in whole or in part, in writing, by the Grantee. If requested by the Grantor, such writing will be executed by Grantee in recordable form.

12. Environmental Protection Easement: Grantor hereby grants to the Grantee an irrevocable, permanent and continuing right of access at all reasonable times to the Property for the purposes of:

- a) Implementing the response actions in the ROD, including but not limited to Monitored Natural Attenuation (MNA);
- b) Verifying any data or information submitted to the EPA;
- c) Verifying that no action is being taken on the Property in violation of the terms of this instrument or of any federal or state environmental laws or regulations;
- d) Monitoring response actions on the Site and conducting investigations relating to contamination on or near the Site, including, without limitation, sampling of air, water, sediments, soils and specifically, without limitation, obtaining split or duplicate samples;
- e) Conducting periodic reviews of the remedial action, including but not limited to, reviews required by applicable statutes and/or regulations; and
- f) Implementing additional or new response actions if the Grantee, in its sole discretion, determines: i) that such actions are necessary to protect the environment because either the original remedial action has proven to be ineffective or because new technology has been developed which will accomplish the purposes of the remedial action in a significantly more efficient or cost effective manner; and ii) that the additional or new response actions will not impose any significantly greater burden on the Property or unduly interfere with the then existing uses of the Property.

13. Reserved Rights of Grantor: Grantor hereby reserves unto itself, its successors and assigns, all rights and privileges in and to the use of the Property which are not incompatible with the restrictions, rights and easements granted herein.

14. Nothing in this document shall limit or otherwise affect EPA's rights of entry and access or EPA's authority to take response actions under CERCLA, the NCP or other federal law.

15. No Public Access and Use: No right of access or use by the general public to any portion of the Property is conveyed by this instrument.

16. Notice Requirement: Grantor agrees to include in any instrument conveying any interest in any portion of the Property, including but not limited to Deeds, Leases and Mortgages, a notice which is in substantially the following form:

NOTICE: THE INTEREST CONVEYED HEREBY IS SUBJECT TO AN ENVIRONMENTAL PROTECTION EASEMENT AND DECLARATION OF RESTRICTIVE COVENANTS, DATED OCTOBER ____, 2010, RECORDED IN THE PUBLIC LAND RECORDS OF THE MONROE COUNTY REGISTER OF DEEDS ON OCTOBER ____, 2010, AS DOCUMENT NO. _____, IN FAVOR OF, AND ENFORCEABLE BY, THE UNITED STATES OF AMERICA.

Within thirty (30) days of the date any such instrument of conveyance is executed, Grantor must provide Grantee with a certified true copy of said instrument and, if it has been recorded in the public land records, its recording reference.

17. Administrative Jurisdiction: The federal agency having administrative jurisdiction over the interests acquired by the United States by this instrument is the EPA.

18. Enforcement: The Grantee shall be entitled to enforce the terms of this instrument by resort to specific performance or legal process. All remedies available hereunder shall be in addition to any and all other remedies at law or in equity, including CERCLA. Enforcement of the terms of this instrument shall be at the discretion of the Grantee, and any forbearance, delay or omission to exercise its rights under this instrument in the event of a breach of any term of this instrument shall not be deemed to be a waiver by the Grantee of such term or of any subsequent breach of the same or any other term, or of any of the rights of the Grantee under this instrument.

19. Damages: Grantee shall be entitled to recover damages for violations of the terms of this instrument, or for any injury to the remedial action, to the public or to the environment protected by this instrument.

20. Waiver of Certain Defenses: Grantor hereby waives any defense of laches, estoppel or prescription.

21. Covenants: Grantor hereby covenants to and with the Grantee and its assigns, that the Grantor is lawfully seized in fee simple of the Property, that the Grantor has a good and lawful right and power to sell and convey it or any interest therein, that the Property is free and clear of encumbrances, except those noted on Exhibit "B" attached hereto, and that the Grantor will forever warrant and defend the title thereto and the quiet possession thereof.

22. Notices: Any notice, demand, request, consent, approval or communication that either party desires or is required to give to the other shall be in writing and shall either be served personally or sent by first class mail, postage prepaid, addressed as follows:

To Grantor:

Managed Investments, Inc.
317 Plastic Avenue
Tomah, Wisconsin 54660

To Grantee:

U.S. Environmental Protection Agency
Region Five Administration
77 West Jackson Boulevard
Chicago, Illinois 60604

and

Wisconsin Department of Natural Resources
1300 West Clairemont Avenue
Post Office Box 4001
Eau Claire, Wisconsin 54702-4001

23. General Provisions:

a) Controlling Law: The interpretation and performance of this instrument shall be governed by the laws of the United States or, if there are no applicable federal laws, by the law of the state where the Property is located.

b) Liberal Construction: Any general rule of construction to the contrary notwithstanding, this instrument shall be liberally construed in favor of the Grantee to effect the purpose of this instrument and the policy and purpose of CERCLA. If any provision of this instrument is found to be ambiguous, an interpretation consistent with the purpose of this instrument that would render the provision valid shall be favored over any interpretation that would render it invalid.

c) Severability: If any provision of this instrument, or the application of it to any person or circumstance, is found to be invalid, the remainder of the provisions of this instrument, or the application of such provisions to persons or circumstances other than those to which it is found to be invalid, as the case may be, shall not be affected thereby.

d) Entire Agreement: This instrument sets forth the entire agreement of the parties with respect to rights and restrictions created hereby, and supersedes all prior discussions, negotiations, understandings or agreements relating thereto, all of which are merged herein.

e) No Forfeiture: Nothing contained herein will result in a forfeiture or reversion of Grantor's title in any respect.

f) Joint Obligation: If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

g) Successors: The covenants, terms, conditions and restrictions of this instrument shall be binding upon, and inure to the benefit of, the parties hereto and their respective personal representatives, heirs, successors and assigns and shall continue as a servitude running in perpetuity with the Property. The term "Grantor", wherever used herein, and any pronouns used in place thereof, shall include the persons and/or entities named at the beginning of this document, identified as "Grantor" and their personal representatives, heirs, successors and assigns. The term "Grantee", wherever used herein, and any pronouns used in place thereof, shall include the persons and/or entities named at the beginning of this document, identified as "Grantee" and their personal representatives, heirs, successors and assigns. The rights of the Grantee and Grantor under this instrument are freely assignable, subject to the notice provisions hereof.

h) Termination of Rights and Obligations: A party's rights and obligations under this instrument terminate upon transfer of the party's interest in the Easement or Property, except that liability for acts or omissions occurring prior to transfer shall survive transfer.

i) Captions: The captions in this instrument have been inserted solely for convenience of reference and are not a part of this instrument and shall have no effect upon construction or interpretation.

j) Counterparts: The parties may execute this instrument in two or more counterparts, which shall, in the aggregate, be signed by both parties; each counterpart shall be deemed an original instrument as against any party who has signed it. In the event of any disparity between the counterparts produced, the recorded counterpart shall be controlling.

TO HAVE AND TO HOLD unto the United States and its assigns forever.

IN WITNESS WHEREOF, Grantor has caused this Agreement to be signed in its name.

Executed this _____ day of _____, 2011.

GRANTOR:
MANAGED INVESTMENTS, INC.

By: _____
Peter Thorson, Officer

STATE OF WISCONSIN)
)ss.
COUNTY OF MONROE)

On this _____ day of _____, 2011, before me, the undersigned, a Notary Public in and for the State of Wisconsin, duly commissioned and sworn, personally appeared, the Grantor, Peter Thorson, that executed the foregoing instrument and acknowledged the said instrument to be the free and voluntary act and deed of said Grantor, for the uses and purposes therein mentioned, and on oath stated that they are authorized to execute said document.

Witness my hand and official seal hereto affixed the day and year written above.

Richard A. Radcliffe
Notary Public, Monroe County, Wisconsin
My Commission is Permanent.

This Easement is accepted this _____ day of _____, 2011.

UNITED STATES OF AMERICA

the persons and/or entities named at the beginning of this document, identified as Grantor and their personal representatives, heirs, successors and assigns.

U.S. ENVIRONMENTAL PROTECTION AGENCY

By: _____

This Easement is accepted this _____ day of _____, 2011.

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

the persons and/or entities named at the beginning of this document, identified as Grantor and their personal representatives, heirs, successors and assigns.

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

By: _____

- Attachments: Exhibit A - Legal description of the Property
 Exhibit B - List of permitted title encumbrances

EXHIBIT "A"

Legal Description

2008 Property Record | Monroe County, WI

Assessed values not finalized until after Board of Review
 Years marked with * have delinquent taxes

Property Information is valid as of 11/9/09

Owner
 Managed Investments Inc.
 317 Plastic Ave
 Tomah WI 54660

Co-Owner(s)
 No co-owners listed

Property Information
 Parcel ID: 020-01304-5000
 School Districts: Vocational School
 Tomah School Dist

Section	Township	Range	Qtr	Qtr	Section	Qtr	Section
33	18N	1W			SE		NW

Lot:
 Block:
 Plat Name: Unplatted Lands

Property Description
 Part Of The Se1/4 Of Nw1/4 Being Part Of OI 1 16csm78
 #520950 Exc Lands In City Of Tomah (see: 286-02713-1000)

Property Address: No address listed
Municipality: Town Of La Grange

Deed Information

Volume	Page	Document #
		523454
		519584
404R	693	513211
324R	01	490220
214R	634	
185R	119	

Tax Information

Net Tax Before Lottery, First Dollar Credits	47.71
Lottery Credit	.00
First Dollar Credit	.00
Net Tax After	47.71

	Amt. Due	Amt. Paid	Balance
Tax	47.71	.00	47.71
Special Assessment	.00	.00	.00
Special Charges	.00	.00	.00
Delinquent Charges	.00	.00	.00
Woodland Tax	.00	.00	.00
Private Forest Crop	.00	.00	.00
Managed Forest Land	.00	.00	.00
Property Tax Interest		.00	4.77
Special Tax Interest		.00	.00
Other Charges	.00	.00	.00
Total	47.71	.00	52.48
Over-Payment		.00	

Land Valuation

Tax Code	Acres	Value	Improvements	Total
G5	4.060	2400.00		2400.0
	4.060	\$2400.00	\$0.00	\$2400.00

Total Acres: 4.060
 Assessment Ratio: 0.8176
 Mill Rate: 0.019880457
 Fair Market Value: \$2900.00

Installments

Period	End Date	Amount	Period	End Date	Amount
1.	01/31/2009	47.71	2.	07/31/2009	.00

Payment History (Posted Payments)

Date	Receipt #	Source	Type	Amount	Gen. Tax Balance	Spec. Assessment Balance	Intrest	Penalty	Total
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EXHIBIT "B"

Permitted Encumbrances

TOMAH CITY ATTORNEY

917 SUPERIOR AVENUE
P.O. BOX 110
TOMAH, WI 54660

PENNY J. PRECOUR
CITY ATTORNEY

TELEPHONE (608) 372-2014
FACSIMILE (608) 372-2447

April 27, 2018

Mark S. Mueller, DDS
DEER CREEK DENTAL CLINIC, LTD
820 North Superior Avenue
Tomah, Wisconsin 54660

Re: City of Tomah Landfill

Dear Dr. Mueller:

This letter is written in regards to the on-going remediation efforts at the Tomah Municipal Sanitary Landfill Superfund Site ("SITE"). As part of the remedial action for the SITE, the Potentially Responsible Parties ("PRPs"), including the City of Tomah and International Paper, have been investigating the potential for groundwater contamination at your property adjacent to the contamination plume. The PRPs have a comprehensive monitoring program and testing program to continually monitor the extent and location of the groundwater contamination plume. At present, there is no evidence to suggest that the plume has impacted your property. However, that possibility exists given the proximity of your property to the SITE.

In addition, the PRPs have been asked to have you execute and record an Environmental Protection Easement and Declaration of Restrictive Covenants ("EASEMENT") for your property nearby the SITE. A copy of the EASEMENT is attached. The EASEMENT is part of the Institutional Controls for the SITE. The purpose of this EASEMENT is to provide notice to future owners that a risk of groundwater contamination exists. Even though you have refused to sign the Easement, you still have a legal obligation to notify future owners of this risk.

If you have any questions, please feel free to contact me directly. Thank you.

Very truly yours,

Penny J. Precour
City Attorney

PJP:cf

Enclosure

cc: Mr. Roger Gorius, City Administrator (via email - w/o encl.)
Mr. Ryan Aamot, GHD (via email - w/encl.)
Mr. Philip Slowiak, International Paper (via email - w/o encl.)

ENVIRONMENTAL PROTECTION EASEMENT
AND
DECLARATION OF RESTRICTIVE COVENANTS

Document Number

Document Title

COPY

1. This Environmental Protection Easement and Declaration of Restrictive Covenants is made this _____ day of June, 2005, by and between **MARK S. MUELLER, d/b/a DEER CREEK DENTAL CLINIC, LTD.** ("Grantor"), having an address of 820 North Superior Avenue, Tomah, Wisconsin 54660, and **UNITED STATES OF AMERICA**, having an address of c/o U.S.

Environmental Protection Agency, Region Five Administrator, 77 West Jackson Boulevard, Chicago, Illinois, 60604, and the **WISCONSIN DEPARTMENT OF NATURAL RESOURCES**, having an address of 1300 West Clairemont Avenue, Post Office Box 4001, Eau Claire, Wisconsin 54702-4001, ("Grantees") collectively known as the Enforcing Agency.

Recording Area

Name and Return Address

Richard A. Radcliffe
Mubarak, Radcliffe & Berry, S.C.
917 Superior Avenue
Post Office Box 110
Tomah, Wisconsin 54660-0110

WITNESSETH:

Parcel Identification Number (PIN)

2. WHEREAS, Grantor is the owner of a parcel of land located in the County of Monroe, State of Wisconsin, more particularly described on Exhibit "A" attached hereto and made a part hereof (the "Property"); and

3. WHEREAS, the Property is part of the Tomah Municipal Sanitary Landfill Superfund Site ("Site"), which the U.S. Environmental Protection Agency ("EPA"), pursuant to Section 105 of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9605, placed on the National Priorities List, set forth at 40 C.F.R. Part 300, Appendix B, by publication in the Federal Register on March 31, 1989, 54 Fed. Reg. 19, 526; and

4. WHEREAS, in a Record of Decision dated September 25, 1997, ("OU1 ROD") and in a Record of Decision dated September 24, 2003 ("OU2 ROD") (the "ROD"), the EPA Region Five (5) Regional Administrator selected a "remedial action" for the Site, which provides, in part, for the following actions; and

5. WHEREAS, the remedial action has been implemented at the Site; and

6. WHEREAS, the parties hereto have agreed 1) to grant a permanent right of access over the Property to the Grantee for the purposes of implementing, facilitating and monitoring the remedial action; and 2) to impose on the Property use restrictions as covenants that will run with the land for the purpose of protecting human health and the environment; and

THIS PAGE IS PART OF THIS LEGAL DOCUMENT - DO NOT REMOVE.

This information must be completed by submitter: document title, name & return address, and PIN (if required). Other information such as the granting clause, legal description, etc., may be placed on this first page of the document or may be placed on additional pages of the document.

WRDA Rev. 12/22/2010

7. **WHEREAS**, Grantor wishes to cooperate fully with the Grantee in the implementation of all response actions at the Site.

NOW, THEREFORE:

8. **Grant:** Grantor, on behalf of itself, its successors and assigns, in consideration of the terms of the Consent Decree in the Case of International Paper Company v. City of Tomah and United States Department of Veterans Affairs, Civil Action No. 00-C-0539-C and United States of America v. International Paper Company and City of Tomah, Civil Action No. 01-C-0693-C in the United States District Court for the Western District of Wisconsin, etc., does hereby covenant and declare that the Property shall be subject to the restrictions on use set forth below, and does give, grant and convey to the Grantee, and its assigns, with general warranties of title, 1) the perpetual right to enforce said use restrictions, and 2) an environmental protection easement of the nature and character, and for the purposes hereinafter set forth, with respect to the Property.

9. **Purpose:** It is the purpose of this instrument to convey to the Grantee real property rights, which will run with the land, to facilitate the remediation of past environmental contamination and to protect human health and the environment by reducing the risk of exposure to contaminants.

10. **Restrictions on Use:** The following covenants, conditions and restrictions apply to the use of the Property, run with the land and are binding on the Grantor:

- A. **Private Well Restrictions.** The Grantor hereby grants and conveys to the Grantee, their heirs, successors and assigns, a perpetual restriction that there shall be no private water well on the Property. All existing wells shall be abandoned. The Grantor shall not use, or permit any person to use, water from a private well for any purpose. The Grantee, or its designee, shall have and retain the right to construct, maintain and/or replace monitoring wells on the Property as deemed necessary by the Grantee from time to time.
- B. **Municipal Water Supply.** The Grantor agrees to hook up to a municipal water supply in the event there is a need for residential water service to the Property in the future.
- C. **Other Action Inconsistent with Remedial Action.** The Grantor hereby agrees not to take any other action, and to refrain from using the Property in any manner, that would interfere with or adversely affect the implementation, integrity or protectiveness of the remedial actions on the Site as described above.

11. Modification of Restrictions: The above restrictions may be modified, or terminated in whole or in part, in writing, by the Grantee. If requested by the Grantor, such writing will be executed by Grantee in recordable form.

12. Environmental Protection Easement: Grantor hereby grants to the Grantee an irrevocable, permanent and continuing right of access at all reasonable times to the Property for the purposes of:

- a) Implementing the response actions in the ROD, including but not limited to Monitored Natural Attenuation (MNA);
- b) Verifying any data or information submitted to the EPA;
- c) Verifying that no action is being taken on the Property in violation of the terms of this instrument or of any federal or state environmental laws or regulations;
- d) Monitoring response actions on the Site and conducting investigations relating to contamination on or near the Site, including, without limitation, sampling of air, water, sediments, soils and specifically, without limitation, obtaining split or duplicate samples;
- e) Conducting periodic reviews of the remedial action, including but not limited to, reviews required by applicable statutes and/or regulations; and
- f) Implementing additional or new response actions if the Grantee, in its sole discretion, determines: i) that such actions are necessary to protect the environment because either the original remedial action has proven to be ineffective or because new technology has been developed which will accomplish the purposes of the remedial action in a significantly more efficient or cost effective manner; and ii) that the additional or new response actions will not impose any significantly greater burden on the Property or unduly interfere with the then existing uses of the Property.

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14. Nothing in this document shall limit or otherwise affect EPA's rights of entry and access or EPA's authority to take response actions under CERCLA, the NCP or other federal law.

15. No Public Access and Use: No right of access or use by the general public to any portion of the Property is conveyed by this instrument.

16. Notice Requirement: Grantor agrees to include in any instrument conveying any interest in any portion of the Property, including but not limited to Deeds, Leases and Mortgages, a notice which is in substantially the following form:

NOTICE: THE INTEREST CONVEYED HEREBY IS SUBJECT TO AN ENVIRONMENTAL PROTECTION EASEMENT AND DECLARATION OF RESTRICTIVE COVENANTS, DATED OCTOBER _____, 2010, RECORDED IN THE PUBLIC LAND RECORDS OF THE MONROE COUNTY REGISTER OF DEEDS ON OCTOBER _____, 2010, AS DOCUMENT NO. _____, IN FAVOR OF, AND ENFORCEABLE BY, THE UNITED STATES OF AMERICA.

Within thirty (30) days of the date any such instrument of conveyance is executed, Grantor must provide Grantee with a certified true copy of said instrument and, if it has been recorded in the public land records, its recording reference.

17. Administrative Jurisdiction: The federal agency having administrative jurisdiction over the interests acquired by the United States by this instrument is the EPA.

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19. Damages: Grantee shall be entitled to recover damages for violations of the terms of this instrument, or for any injury to the remedial action, to the public or to the environment protected by this instrument.

20. Waiver of Certain Defenses: Grantor hereby waives any defense of laches, estoppel or prescription.

21. Covenants: Grantor hereby covenants to and with the Grantee and its assigns, that the Grantor is lawfully seized in fee simple of the Property, that the Grantor has a good and lawful right and power to sell and convey it or any interest therein, that the Property is free and clear of encumbrances, except those noted on Exhibit "B" attached hereto, and that the Grantor will forever warrant and defend the title thereto and the quiet possession thereof.

22. Notices: Any notice, demand, request, consent, approval or communication that either party desires or is required to give to the other shall be in writing and shall either be served personally or sent by first class mail, postage prepaid, addressed as follows:

To Grantor:

Mark S. Mueller, DDS
820 North Superior Avenue
Tomah, Wisconsin 54660

To Grantee:

U.S. Environmental Protection Agency
Region Five Administration
77 West Jackson Boulevard
Chicago, Illinois 60604

and

Wisconsin Department of Natural Resources
1300 West Clairemont Avenue
Post Office Box 4001
Eau Claire, Wisconsin 54702-4001

23. General Provisions:

a) Controlling Law: The interpretation and performance of this instrument shall be governed by the laws of the United States or, if there are no applicable federal laws, by the law of the state where the Property is located.

b) Liberal Construction: Any general rule of construction to the contrary notwithstanding, this instrument shall be liberally construed in favor of the Grantee to effect the purpose of this instrument and the policy and purpose of CERCLA. If any provision of this instrument is found to be ambiguous, an interpretation consistent with the purpose of this instrument that would render the provision valid shall be favored over any interpretation that would render it invalid.

c) Severability: If any provision of this instrument, or the application of it to any person or circumstance, is found to be invalid, the remainder of the provisions of this instrument, or the application of such provisions to persons or circumstances other than those to which it is found to be invalid, as the case may be, shall not be affected thereby.

d) Entire Agreement: This instrument sets forth the entire agreement of the parties with respect to rights and restrictions created hereby, and supersedes all prior discussions, negotiations, understandings or agreements relating thereto, all of which are merged herein.

e) No Forfeiture: Nothing contained herein will result in a forfeiture or reversion of Grantor's title in any respect.

f) Joint Obligation: If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

g) Successors: The covenants, terms, conditions and restrictions of this instrument shall be binding upon, and inure to the benefit of, the parties hereto and their respective personal representatives, heirs, successors and assigns and shall continue as a servitude running in perpetuity with the Property. The term "Grantor", wherever used herein, and any pronouns used in place thereof, shall include the persons and/or entities named at the beginning of this document, identified as "Grantor" and their personal representatives, heirs, successors and assigns. The term "Grantee", wherever used herein, and any pronouns used in place thereof, shall include the persons and/or entities named at the beginning of this document, identified as "Grantee" and their personal representatives, heirs, successors and assigns. The rights of the Grantee and Grantor under this instrument are freely assignable, subject to the notice provisions hereof.

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TO HAVE AND TO HOLD unto the United States and its assigns forever.

IN WITNESS WHEREOF, Grantor has caused this Agreement to be signed in its name.

Executed this _____ day of _____, 2011.

GRANTOR:
MARK S. MUELLER

By: _____
Mark S. Mueller

STATE OF WISCONSIN)
)ss.
COUNTY OF MONROE)

On this _____ day of _____, 2011, before me, the undersigned, a Notary Public in and for the State of Wisconsin, duly commissioned and sworn, personally appeared, the Grantor, Mark S. Mueller, that executed the foregoing instrument and acknowledged the said instrument to be the free and voluntary act and deed of said Grantor, for the uses and purposes therein mentioned, and on oath stated that they are authorized to execute said document.

Witness my hand and official seal hereto affixed the day and year written above.

Richard A. Radcliffe
Notary Public, Monroe County, Wisconsin
My Commission is Permanent.

This Easement is accepted this _____ day of _____, 2011.

UNITED STATES OF AMERICA

the persons and/or entities named at the beginning of this document, identified as Grantor and their personal representatives, heirs, successors and assigns.

U.S. ENVIRONMENTAL PROTECTION AGENCY

By: _____

This Easement is accepted this _____ day of _____, 2011.

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

the persons and/or entities named at the beginning of this document, identified as Grantor and their personal representatives, heirs, successors and assigns.

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

By: _____

Attachments: Exhibit A - Legal description of the Property
 Exhibit B - List of permitted title encumbrances

EXHIBIT "A"

Legal Description

2008 Property Record | Monroe County, WI

Assess values are based on the Board of Assessors Taxer marked with * have delinquent taxes

Property Information is valid as of 10/24/08

Owner Erik Cook Properties LLC 917 Oak St Tonawanda WI 54486				Co-Owner(s) No co-owners listed			
Property Information Parcel ID: 020-0100-2000 School District: Tonawanda School District Tax Year: 2008				Property Description Part Of The S1/4 NW1/4 & S1/4 NE1/4 Being Part Of Lot 1 Of (160000) #52990 On address listed: Tonawanda Municipality: Town of La Grange			
Section 30 18N 1W 30 18N 1W				Dir. Section SW NW SE NW			
Lot 1				Block 160000			
Flak Name 160000				Deed Information Volume: 650 Page: 210 Record #: 31554 31554 31554			
Tax Information Net Tax Before Lottery, First Dollar Credits: 133.20 Lottery Credit: .00 First Dollar Credit: .00 Net Tax After: 133.20				Land Valuation Tax Code: 00 Area: 8.810 Value: 6700.00 Exemption: 0.00 Total: 6700.00 Total Acres: 8.810 Assessed Value: 6700.00 Full Value: 801560457 Fair Market Value: 801560457			
Tax Details Tax: 133.20 Special Assessment: .00 Special Charges: .00 Delinquent Charges: .00 Wisconsin Tax: .00 Intangible Tax: .00 Municipal Property Tax: .00 Property Tax Interest: .00 Special Tax Interest: .00 Other Charges: .00 Total: 133.20 One Payment: .00				Tax Details Period: 1, End Date: 01/31/2009, Amount: 66.60 Period: 2, End Date: 07/31/2009, Amount: 66.60			
Payment History (Posted Payments) Date: 12/23/2008, Amount: 133.20, Status: H, Type: T, Amount: 133.20, Sec. Tax Status: N, Sec. Assessment Status: N, Interest: .00, Penalty: .00, Total: 133.20							

EXHIBIT "B"

Permitted Encumbrances

TOMAH CITY ATTORNEY

917 SUPERIOR AVENUE

P.O. BOX 110

TOMAH, WI 54660

PENNY J. PRECOUR
CITY ATTORNEY

TELEPHONE (608) 372-2014
FACSIMILE (608) 372-2447

April 27, 2018

Mr. and Mrs. John Pleuss
24241 County Highway ET
Tomah, Wisconsin 54660

Re: City of Tomah Landfill

Dear Mr. and Mrs. Pleuss:

This letter is written in regards to the on-going remediation efforts at the Tomah Municipal Sanitary Landfill Superfund Site ("SITE"). In 2005, as part of the remedial action for the SITE, the Parties ("PRPs") notified you that there was a potential for groundwater contamination at your property adjacent to the contamination plume. The PRPs further notified you that there is a potential that your private drinking water wells may be impacted by the groundwater contamination. The PRPs have offered to extend municipal water to your property, which offer you have refused. If you wish to receive a municipal water connection at any time that this risk of contamination exists, the PRPs will continue to make that offer.

In addition, the PRPs sought to have you execute and record an Environmental Protection Easement and Declaration of Restrictive Covenants ("EASEMENT") for your property nearby the SITE. A copy of the EASEMENT is attached. The EASEMENT was part of the Institutional Controls for the SITE. The purpose of this EASEMENT was to provide notice to future owners that a risk of groundwater contamination exists. Even though you have refused to sign the EASEMENT, you still have a legal obligation to notify future owners of this risk.

If you have any questions, please feel free to contact me directly. Thank you.

Very truly yours,

Penny J. Precour
City Attorney

PJP:cf

Enclosure

cc: Mr. Roger Gorius, City Administrator (via email - w/o encl.)
Mr. Ryan Aamot, GHD (via email - w/encl.)
Mr. Philip Slowiak, International Paper (via email - w/o encl.)

ENVIRONMENTAL PROTECTION EASEMENT
AND
DECLARATION OF RESTRICTIVE COVENANTS

Document Number

Document Title

COPY

1. This Environmental Protection Easement and Declaration of Restrictive Covenants is made this _____ day of June, 2005, by and between JOHN D. PLEUSS, a/k/a JOHN PLEUSS and MINA L. PLEUSS, ("Grantor"), having an address of Route 1, Tomah, Wisconsin 54660, and UNITED STATES OF AMERICA, ("Grantee"), having an address of c/o U.S. Environmental Protection Agency, Region Five Administrator, 77 West Jackson Boulevard, Chicago, Illinois, 60604.

WITNESSETH:

Recording Area

Name and Return Address

Richard A. Radcliffe
MUBARAK, RADCLIFFE & BERRY, S.C.
917 Superior Avenue
Post Office Box 110
Tomah, Wisconsin 54660

2. WHEREAS, Grantor is the owner of a parcel of land located in the County of Monroe, State of Wisconsin; more particularly described on Exhibit "A" attached hereto and made a part hereof (the "Property"); and

Parcel Identification Number (PIN)

3. WHEREAS, the Property is part of the Tomah Municipal Sanitary Landfill Superfund Site ("Site"), which the U.S. Environmental Protection Agency ("EPA"), pursuant to Section 105 of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9605, placed on the National Priorities List, set forth at 40 C.F.R. Part 300, Appendix B, by publication in the Federal Register on March 31, 1989, 54 Fed. Reg. 19,526; and

4. WHEREAS, in a Record of Decision dated September 25, 1997, ("OU1 ROD") and in a Record of Decision dated September 24, 2003 ("OU2 ROD") (the "ROD"), the EPA Region Five (5) Regional Administrator selected a "remedial action" for the Site, which provides, in part, for the following actions; and

5. WHEREAS, with the exception of the OU2 response action, the remedial action has been implemented at the Site; and

6. WHEREAS, the parties hereto have agreed 1) to grant a permanent right of access over the Property to the Grantee for the purposes of implementing, facilitating, and monitoring the remedial action; and 2) to impose on the Property use restrictions as covenants that will run with the land for the purpose of protecting human health and the environment; and

7. WHEREAS, Grantor wishes to cooperate fully with the Grantee in the implementation of all response actions at the Site.

This information must be completed by submitter: document title, name & return address, and PIN (if required). Other information such as the granting clauses, legal description, etc. may be placed on this first page of the document or may be placed on additional pages of the document. Note: Use of this cover page adds one page to your document and \$2.00 to the recording fee. Wisconsin Statutes, 59.43(2m) WRDA 10/99

3

NOW, THEREFORE:

8. Grant: Grantor, on behalf of itself, its successors and assigns, in consideration of the terms of the Consent Decree in the Case of International Paper Company v. City of Tomah and United States Department of Veterans Affairs, Civil Action No. 00-C-0539-C and United States of America v. International Paper Company and City of Tomah, Civil Action No. 01-C-0693-C in the United States District Court for the Western District of Wisconsin, etc., does hereby covenant and declare that the Property shall be subject to the restrictions on use set forth below, and does give, grant and convey to the Grantee, and its assigns, with general warranties of title, 1) the perpetual right to enforce said use restrictions, and 2) an environmental protection easement of the nature and character, and for the purposes hereinafter set forth, with respect to the Property.

9. Purpose: It is the purpose of this instrument to convey to the Grantee real property rights, which will run with the land, to facilitate the remediation of past environmental contamination and to protect human health and the environment by reducing the risk of exposure to contaminants.

10. Restrictions on Use: The following covenants, conditions and restrictions apply to the use of the Property, run with the land and are binding on the Grantor:

- A. Private Well Restrictions. The Grantee hereby grants and conveys to the Grantor, their heirs, successors and assigns, a perpetual restriction that there shall be no private water well on the Property. All existing wells shall be abandoned. The grantee shall not use, or permit any person to use, water from a private well for any purpose. The Grantor, or its designee, shall have and retain the right to construct, maintain and/or replace monitoring wells on the Property as deemed necessary by the Grantor from time to time.
- B. Municipal Water Supply. The Grantee agrees to hook up to a municipal water supply in the event there is a need for residential water service to the Property in the future.
- C. Other Action Inconsistent with Remedial Action. The Grantee hereby agrees not to take any other action, and to refrain from using the Property in any manner, that would interfere with or adversely affect the implementation, integrity or protectiveness of the remedial actions on the Site as described above.

11. Modification of Restrictions: The above restrictions may be modified, or terminated in whole or in part, in writing, by the Grantee. If requested by the Grantor, such writing will be executed.

by Grantee in recordable form.

12. Environmental Protection Easement: Grantor hereby grants to the Grantee an irrevocable, permanent and continuing right of access at all reasonable times to the Property for the purposes of:

- a) Implementing the response actions in the ROD, including but not limited to Monitored Natural Attenuation (MNA);
- b) Verifying any data or information submitted to the EPA;
- c) Verifying that no action is being taken on the Property in violation of the terms of this instrument or of any federal or state environmental laws or regulations;
- d) Monitoring response actions on the Site and conducting investigations relating to contamination on or near the Site, including, without limitation, sampling of air, water, sediments, soils and specifically, without limitation, obtaining split or duplicate samples;
- e) Conducting periodic reviews of the remedial action, including but not limited to, reviews required by applicable statutes and/or regulations; and
- f) Implementing additional or new response actions if the Grantee, in its sole discretion, determines: i) that such actions are necessary to protect the environment because either the original remedial action has proven to be ineffective or because new technology has been developed which will accomplish the purposes of the remedial action in a significantly more efficient or cost effective manner; and ii) that the additional or new response actions will not impose any significantly greater burden on the Property or unduly interfere with the then existing uses of the Property.

13. Reserved Rights of Grantor: Grantor hereby reserves unto itself, its successors and assigns, all rights and privileges in and to the use of the Property which are not incompatible with the restrictions, rights and easements granted herein.

14. Nothing in this document shall limit or otherwise affect EPA's rights of entry and access or EPA's authority to take response actions under CERCLA, the NCP or other federal law.

15. No Public Access and Use: No right of access or use by the general public to any portion of the Property is conveyed by this instrument.

16. Notice Requirement: Grantor agrees to include in any instrument conveying any interest in any portion of the Property, including but not limited to Deeds, Leases and Mortgages, a notice which is in substantially the following form:

NOTICE: THE INTEREST CONVEYED HEREBY IS SUBJECT TO AN ENVIRONMENTAL PROTECTION EASEMENT AND DECLARATION OF RESTRICTIVE COVENANTS, DATED JUNE ____, 2005, RECORDED IN THE PUBLIC LAND RECORDS OF THE MONROE COUNTY REGISTER OF DEEDS ON JUNE ____, 2005, AS DOCUMENT NO. _____, IN FAVOR OF, AND ENFORCEABLE BY, THE UNITED STATES OF AMERICA.

Within thirty (30) days of the date any such instrument of conveyance is executed, Grantor must provide Grantee with a certified true copy of said instrument and, if it has been recorded in the public land records, its recording reference.

17. Administrative Jurisdiction: The federal agency having administrative jurisdiction over the interests acquired by the United States by this instrument is the EPA.

18. Enforcement: The Grantee shall be entitled to enforce the terms of this instrument by resort to specific performance or legal process. All remedies available hereunder shall be in addition to any and all other remedies at law or in equity, including CERCLA. Enforcement of the terms of this instrument shall be at the discretion of the Grantee, and any forbearance, delay or omission to exercise its rights under this instrument in the event of a breach of any term of this instrument shall not be deemed to be a waiver by the Grantee of such term or of any subsequent breach of the same or any other term, or of any of the rights of the Grantee under this instrument.

19. Damages: Grantee shall be entitled to recover damages for violations of the terms of this instrument, or for any injury to the remedial action, to the public or to the environment protected by this instrument.

20. Waiver of Certain Defenses: Grantor hereby waives any defense of laches, estoppel or prescription.

21. Covenants: Grantor hereby covenants to and with the United States and its assigns, that the Grantor is lawfully seized in fee simple of the Property, that the Grantor has a good and lawful

right and power to sell and convey it or any interest therein, that the Property is free and clear of encumbrances, except those noted on Exhibit "B" attached hereto, and that the Grantor will forever warrant and defend the title thereto and the quiet possession thereof.

22. Notices: Any notice, demand, request, consent, approval or communication that either party desires or is required to give to the other shall be in writing and shall either be served personally or sent by first class mail, postage prepaid, addressed as follows:

To Grantor:

John D. and Mina L. Pleuss
Route 1
Tomah, Wisconsin 54660

To Grantee:

U.S. Environmental Protection Agency
Region Five Administration
77 West Jackson Boulevard
Chicago, Illinois 60604

23. General Provisions:

a) Controlling Law: The interpretation and performance of this instrument shall be governed by the laws of the United States or, if there are no applicable federal laws, by the law of the state where the Property is located.

b) Liberal Construction: Any general rule of construction to the contrary notwithstanding, this instrument shall be liberally construed in favor of the Grantee to effect the purpose of this instrument and the policy and purpose of CERCLA. If any provision of this instrument is found to be ambiguous, an interpretation consistent with the purpose of this instrument that would render the provision valid shall be favored over any interpretation that would render it invalid.

c) Severability: If any provision of this instrument, or the application of it to any person or circumstance, is found to be invalid, the remainder of the provisions of this instrument, or the application of such provisions to persons or circumstances other than those to which it is found to be invalid, as the case may be, shall not be affected thereby.

d) Entire Agreement: This instrument sets forth the entire agreement of the parties with respect to rights and restrictions created hereby, and supersedes all prior discussions, negotiations, understandings or agreements relating thereto, all of which are merged herein.

e) No Forfeiture: Nothing contained herein will result in a forfeiture or reversion of Grantor's title in any respect.

f) Joint Obligation: If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

g) Successors: The covenants, terms, conditions and restrictions of this instrument shall be binding upon, and inure to the benefit of, the parties hereto and their respective personal representatives, heirs, successors and assigns and shall continue as a servitude running in perpetuity with the Property. The term "Grantor", wherever used herein, and any pronouns used in place thereof, shall include the persons and/or entities named at the beginning of this document, identified as "Grantor" and their personal representatives, heirs, successors and assigns. The term "Grantee", wherever used herein, and any pronouns used in place thereof, shall include the persons and/or entities named at the beginning of this document, identified as "Grantee" and their personal representatives, heirs, successors and assigns. The rights of the Grantee and Grantor under this instrument are freely assignable, subject to the notice provisions hereof.

h) Termination of Rights and Obligations: A party's rights and obligations under this instrument terminate upon transfer of the party's interest in the Easement or Property, except that liability for acts or omissions occurring prior to transfer shall survive transfer.

i) Captions: The captions in this instrument have been inserted solely for convenience of reference and are not a part of this instrument and shall have no effect upon construction or interpretation.

j) Counterparts: The parties may execute this instrument in two or more counterparts, which shall, in the aggregate, be signed by both parties; each counterpart shall be deemed an original instrument as against any party who has signed it. In the event of any disparity between the counterparts produced, the recorded counterpart shall be controlling.

TO HAVE AND TO HOLD unto the United States and its assigns forever.

IN WITNESS WHEREOF, Grantor has caused this Agreement to be signed in its name.

Executed this _____ day of June, 2005.

GRANTOR:

By: _____
John D. Pleuss

Attachments: Exhibit A - Legal description of the Property
 Exhibit B - List of permitted title encumbrances

EXHIBIT "A"

Legal Description

SCHEDULE A

Commitment No.- 05MO26516
Effective Date of Commitment- 5/16/2005 4:00:00 PM

Prepared For:

Mubarak, Radcliffe & Berry, S.C.
PO Box 110
917 Superior Avenue
Tomah, WI 54660-0110

Inquiries Should be Directed to:

Monroe County Abstract & Title Co., Inc.
PO Box 458 - 139 N. Court Street
Sparta, WI 54656
(608) 269-6781

1. Policy or Policies to be issued:

Amount

(a) ALTA Owners Policy 1992
Proposed Insured:

\$15,000.00

City of Tomah

(b) ALTA Loan Policy 1992
Proposed Insured:

NONE

2. The Estate or interest in the land described or referred to in this Commitment and covered herein is a Fee Simple

3. Title to said estate or interest in said land is at the effective date hereof of record in: John D. Pleuss a/k/a John Pleuss and Mina L. Pleuss, his wife as their interest may appear

4. The land referred to in this Commitment is located in the County of Monroe, State of Wisconsin, and described as follows:

The East Half of the Northeast Quarter of Northeast Quarter (E 1/2 of NE 1/4 of NE 1/4 of NE 1/4), Section Thirty-two (32), Township Eighteen (18) North, Range One (1) West, Town of LaGrange, Monroe County, Wisconsin.
(The above description includes those lands described in Vol. 2 CSM on page 289 as Doc. No. 321851.)

Shown For Information:

Parcel No. 020-01211-0000
2004 Tax \$2015.82 - 80.39 (Lottery Credit) = \$1935.43

Parcel No. 020-01209-2000
2004 Tax \$136.38 (No Lottery Credit)

The policy or policies to be issued will contain exceptions to the following matters unless the same are disposed of to the satisfaction of the Company:

1. Defects, liens, encumbrances, adverse claims or other matters, if any, created, first appearing in the public records or attaching subsequent to the effective date hereof but prior to the date the proposed Insured acquires for value of record the estate or interest or mortgage thereon covered by this Commitment
2. Special taxes or assessments, if any, payable with the taxes levied or to be levied for the current and subsequent years.
3. Liens, hook-up charges or fees, deferred charges, reserve capacity assessments, impact fees, or other charges or fees due payable on the development or improvement of the Land, whether assessed or charged before or after the Date of Policy.
4. Any lien, or right to a lien, for services, labor, or material heretofore or hereafter furnished, imposed by law and not shown by the public records.
5. Rights or claims of parties in possession not shown by the public records.
6. Encroachments, overlaps, boundary line disputes, and any other matter which would be disclosed by an accurate survey and inspection of the premises.
7. Easements or claims of easements not shown by the public records.
8. Any claim of adverse possession or prescriptive easement
9. General Taxes for the year 2005 not yet due and payable.
10. 2004 taxes are postponed in the amount of \$68.19 – Parcel No. 020-01209-2000
2004 taxes are postponed in the amount of \$1007.91 – Parcel No. 020-01211-0000
11. Easement granted to North-West Telephone Company by an instrument dated Sept. 29, 1983 and recorded in the Office of the Register of Deeds for Monroe County, Wisconsin, on Oct. 11, 1983 at 8:30 A.M. in Vol. 37 Records on page 667 as Doc. No. 365707. (See copy attached)
12. Easement granted to City of Tomah by an instrument dated Dec. --, 1998 and recorded in the Office of the Register of Deeds for Monroe County, Wisconsin, on Dec. 28, 1998 at 8 A.M. in Vol. 276 Records on page 587 as Doc. No. 472202. (See copy attached)
13. Public or private rights, if any, in such portion of the subject premises as may be used, laid out or dedicated in any manner whatsoever, for highway purposes.
14. The State of Wisconsin owns the beds of navigable lakes and rivers in trust for the public. This policy does not insure title to any part of the Land described in Schedule A which is below the ordinary high water mark of Deer Creek.

Rights of the federal, state or local government, and other riparian owners, to regulate use of the shore and any riparian rights attached to the land.

The bed of Deer Creek may have moved because of the buildup of material at the shore (accretion), a change in the course of the water body (avulsion), a lowering of the water level (reliction), or removal of dry land by wave action (erosion). This policy does not insure title to any part of the Land described in Schedule A which has been added or lost because of accretion, avulsion, reliction, or erosion.

Rights of the State of Wisconsin and the public in any portion of the Land which has been created by artificial fill in the bed of Deer Creek.

TOMAH CITY ATTORNEY

917 SUPERIOR AVENUE

P.O. BOX 110

TOMAH, WI 54660

PENNY J. PRECOUR
CITY ATTORNEY

TELEPHONE (608) 372-2014
FACSIMILE (608) 372-2447

April 27, 2018

*Mr. and Mrs. Thomas Pleuss
24081 County Highway ET
Tomah, Wisconsin 54660*

Re: City of Tomah Landfill

Dear Mr. and Mrs. Pleuss:

This letter is written in regards to the on-going remediation efforts at the Tomah Municipal Sanitary Landfill Superfund Site ("SITE"). In 2005, as part of the remedial action for the SITE, the Parties ("PRPs") notified you that there was a potential for groundwater contamination at your property adjacent to the contamination plume. The PRPs further notified you that there is a potential that your private drinking water wells may be impacted by the groundwater contamination. The PRPs have offered to extend municipal water to your property, which offer you have refused. If you wish to receive a municipal water connection at any time that this risk of contamination exists, the PRPs will continue to make that offer.

In addition, the PRPs sought to have you execute and record an Environmental Protection Easement and Declaration of Restrictive Covenants ("EASEMENT") for your property nearby the SITE. A copy of the EASEMENT is attached. The EASEMENT was part of the Institutional Controls for the SITE. The purpose of this EASEMENT was to provide notice to future owners that a risk of groundwater contamination exists. Even though you have refused to sign the EASEMENT, you still have a legal obligation to notify future owners of this risk.

If you have any questions, please feel free to contact me directly. Thank you.

Very truly yours,

*Penny J. Precour
City Attorney*

PJP:cf

Enclosure

*cc: Mr. Roger Gorius, City Administrator (via email - w/o encl.)
Mr. Ryan Aamot, GHD (via email - w/encl.)
Mr. Philip Slowiak, International Paper (via email - w/o encl.)*

ENVIRONMENTAL PROTECTION EASEMENT
AND
DECLARATION OF RESTRICTIVE COVENANTS

Document Number

Document Title

COPY

1. This Environmental Protection Easement and Declaration of Restrictive Covenants is made this _____ day of June, 2005, by and between THOMAS R. PLEUSS, a/k/a TOM R. PLEUSS and PATRICIA A. PLEUSS; ("Grantor"), having an address of 24018 County Highway ET, Tomah, Wisconsin 54660, and UNITED STATES OF AMERICA, ("Grantee"), having an address of c/o U.S. Environmental Protection Agency, Region Five Administrator, 77 West Jackson Boulevard, Chicago, Illinois, 60604.

WITNESSETH:

Recording Area

Name and Return Address
Richard A. Radcliffe
MUBARAK, RADCLIFFE & BERRY, S.C.
917 Superior Avenue
Post Office Box 110
Tomah, Wisconsin 54660

2. WHEREAS, Grantor is the owner of a parcel of land located in the County of Monroe, State of Wisconsin; more particularly described on Exhibit "A" attached hereto and made a part hereof (the "Property"); and

Parcel Identification Number (PIN)

3. WHEREAS, the Property is part of the Tomah Municipal Sanitary Landfill Superfund Site ("Site"); which the U.S. Environmental Protection Agency ("EPA"), pursuant to Section 105 of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9605, placed on the National Priorities List, set forth at 40 C.F.R. Part 300, Appendix B, by publication in the Federal Register on March 31, 1989, 54 Fed. Reg. 19,526; and

4. WHEREAS, in a Record of Decision dated September 25, 1997, ("OU1 ROD") and in a Record of Decision dated September 24, 2003 ("OU2 ROD") (the "ROD"), the EPA Region Five (5) Regional Administrator selected a "remedial action" for the Site, which provides, in part, for the following actions; and

5. WHEREAS, with the exception of the OU2 response action, the remedial action has been implemented at the Site; and

6. WHEREAS, the parties hereto have agreed 1) to grant a permanent right of access over the Property to the Grantee for the purposes of implementing, facilitating and monitoring the remedial action; and 2) to impose on the Property use restrictions as covenants that will run with the land for the purpose of protecting human health and the environment; and

7. WHEREAS, Grantor wishes to cooperate fully with the Grantee in the implementation of all response actions at the Site.

This information must be completed by submitter; document title, name & return address, and PIN (if required). Other information such as the granting clauses, legal description, etc. may be placed on this first page of the document or may be placed on additional pages of the document. Note: Use of this cover page adds one page to your document and \$2.00 to the recording fee. Wisconsin Statutes, 59.43(2m) WRDA 10/99

NOW, THEREFORE:

8. Grant: Grantor, on behalf of itself, its successors and assigns, in consideration of the terms of the Consent Decree in the Case of International Paper Company v. City of Tomah and United States Department of Veterans Affairs, Civil Action No. 00-C-0539-C and United States of America v. International Paper Company and City of Tomah, Civil Action No. 01-C-0693-C in the United States District Court for the Western District of Wisconsin, etc., does hereby covenant and declare that the Property shall be subject to the restrictions on use set forth below, and does give, grant and convey to the Grantee, and its assigns, with general warranties of title, 1) the perpetual right to enforce said use restrictions, and 2) an environmental protection easement of the nature and character, and for the purposes hereinafter set forth, with respect to the Property.

9. Purpose: It is the purpose of this instrument to convey to the Grantee real property rights, which will run with the land, to facilitate the remediation of past environmental contamination and to protect human health and the environment by reducing the risk of exposure to contaminants.

10. Restrictions on Use: The following covenants, conditions and restrictions apply to the use of the Property, run with the land and are binding on the Grantor:

- A. Private Well Restrictions. The Grantee hereby grants and conveys to the Grantor, their heirs, successors and assigns, a perpetual restriction that there shall be no private water well on the Property. All existing wells shall be abandoned. The grantee shall not use, or permit any person to use, water from a private well for any purpose. The Grantor, or its designee, shall have and retain the right to construct, maintain and/or replace monitoring wells on the Property as deemed necessary by the Grantor from time to time.
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11. Modification of Restrictions: The above restrictions may be modified, or terminated in whole or in part, in writing, by the Grantee. If requested by the Grantor, such writing will be executed

by Grantee in recordable form.

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- a) Implementing the response actions in the ROD, including but not limited to Monitored Natural Attenuation (MNA);
- b) Verifying any data or information submitted to the EPA;
- c) Verifying that no action is being taken on the Property in violation of the terms of this instrument or of any federal or state environmental laws or regulations;
- d) Monitoring response actions on the Site and conducting investigations relating to contamination on or near the Site, including, without limitation, sampling of air, water, sediments, soils and specifically, without limitation, obtaining split or duplicate samples;
- e) Conducting periodic reviews of the remedial action, including but not limited to, reviews required by applicable statutes and/or regulations; and
- f) Implementing additional or new response actions if the Grantee, in its sole discretion, determines: i) that such actions are necessary to protect the environment because either the original remedial action has proven to be ineffective or because new technology has been developed which will accomplish the purposes of the remedial action in a significantly more efficient or cost effective manner; and ii) that the additional or new response actions will not impose any significantly greater burden on the Property or unduly interfere with the then existing uses of the Property.

13. Reserved Rights of Grantor: Grantor hereby reserves unto itself, its successors and assigns, all rights and privileges in and to the use of the Property which are not incompatible with the restrictions, rights and easements granted herein.

14. Nothing in this document shall limit or otherwise affect EPA's rights of entry and access or EPA's authority to take response actions under CERCLA, the NCP or other federal law.

15. No Public Access and Use: No right of access or use by the general public to any portion of the Property is conveyed by this instrument.

16. Notice Requirement: Grantor agrees to include in any instrument conveying any interest in any portion of the Property, including but not limited to Deeds, Leases and Mortgages, a notice which is in substantially the following form:

NOTICE: THE INTEREST CONVEYED HEREBY IS SUBJECT TO AN ENVIRONMENTAL PROTECTION EASEMENT AND DECLARATION OF RESTRICTIVE COVENANTS, DATED JUNE _____, 2005, RECORDED IN THE PUBLIC LAND RECORDS OF THE MONROE COUNTY REGISTER OF DEEDS ON JUNE _____, 2005, AS DOCUMENT NO. _____, IN FAVOR OF, AND ENFORCEABLE BY, THE UNITED STATES OF AMERICA.

Within thirty (30) days of the date any such instrument of conveyance is executed, Grantor must provide Grantee with a certified true copy of said instrument and, if it has been recorded in the public land records, its recording reference.

17. Administrative Jurisdiction: The federal agency having administrative jurisdiction over the interests acquired by the United States by this instrument is the EPA.

18. Enforcement: The Grantee shall be entitled to enforce the terms of this instrument by resort to specific performance or legal process. All remedies available hereunder shall be in addition to any and all other remedies at law or in equity, including CERCLA. Enforcement of the terms of this instrument shall be at the discretion of the Grantee, and any forbearance, delay or omission to exercise its rights under this instrument in the event of a breach of any term of this instrument shall not be deemed to be a waiver by the Grantee of such term or of any subsequent breach of the same or any other term, or of any of the rights of the Grantee under this instrument.

19. Damages: Grantee shall be entitled to recover damages for violations of the terms of this instrument, or for any injury to the remedial action, to the public or to the environment protected by this instrument.

20. Waiver of Certain Defenses: Grantor hereby waives any defense of laches, estoppel or prescription.

21. Covenants: Grantor hereby covenants to and with the United States and its assigns, that the Grantor is lawfully seized in fee simple of the Property, that the Grantor has a good and lawful

right and power to sell and convey it or any interest therein, that the Property is free and clear of encumbrances, except those noted on Exhibit "B" attached hereto, and that the Grantor will forever warrant and defend the title thereto and the quiet possession thereof.

22. Notices: Any notice, demand, request, consent, approval or communication that either party desires or is required to give to the other shall be in writing and shall either be served personally or sent by first class mail, postage prepaid, addressed as follows:

To Grantor:

Thomas R. & Patricia A. Pleuss
24081 County Highway ET
Tomah, Wisconsin 54660

To Grantee:

U.S. Environmental Protection Agency
Region Five Administration
77 West Jackson Boulevard
Chicago, Illinois 60604

23. General Provisions:

a) Controlling Law: The interpretation and performance of this instrument shall be governed by the laws of the United States or, if there are no applicable federal laws, by the law of the state where the Property is located.

b) Liberal Construction: Any general rule of construction to the contrary notwithstanding, this instrument shall be liberally construed in favor of the Grantee to effect the purpose of this instrument and the policy and purpose of CERCLA. If any provision of this instrument is found to be ambiguous, an interpretation consistent with the purpose of this instrument that would render the provision valid shall be favored over any interpretation that would render it invalid.

c) Severability: If any provision of this instrument, or the application of it to any person or circumstance, is found to be invalid, the remainder of the provisions of this instrument, or the application of such provisions to persons or circumstances other than those to which it is found to be invalid, as the case may be, shall not be affected thereby.

d) Entire Agreement: This instrument sets forth the entire agreement of the parties with respect to rights and restrictions created hereby, and supersedes all prior discussions, negotiations, understandings or agreements relating thereto, all of which are merged herein.

e) No Forfeiture: Nothing contained herein will result in a forfeiture or reversion of Grantor's title in any respect.

f) Joint Obligation: If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

g) Successors: The covenants, terms, conditions and restrictions of this instrument shall be binding upon, and inure to the benefit of, the parties hereto and their respective personal representatives, heirs, successors and assigns and shall continue as a servitude running in perpetuity with the Property. The term "Grantor", wherever used herein, and any pronouns used in place thereof, shall include the persons and/or entities named at the beginning of this document, identified as "Grantor" and their personal representatives, heirs, successors and assigns. The term "Grantee", wherever used herein, and any pronouns used in place thereof, shall include the persons and/or entities named at the beginning of this document, identified as "Grantee" and their personal representatives, heirs, successors and assigns. The rights of the Grantee and Grantor under this instrument are freely assignable, subject to the notice provisions hereof.

h) Termination of Rights and Obligations: A party's rights and obligations under this instrument terminate upon transfer of the party's interest in the Easement or Property, except that liability for acts or omissions occurring prior to transfer shall survive transfer.

i) Captions: The captions in this instrument have been inserted solely for convenience of reference and are not a part of this instrument and shall have no effect upon construction or interpretation.

j) Counterparts: The parties may execute this instrument in two or more counterparts, which shall, in the aggregate, be signed by both parties; each counterpart shall be deemed an original instrument as against any party who has signed it. In the event of any disparity between the counterparts produced, the recorded counterpart shall be controlling.

TO HAVE AND TO HOLD unto the United States and its assigns forever.

IN WITNESS WHEREOF, Grantor has caused this Agreement to be signed in its name.

Executed this _____ day of June, 2005.

GRANTOR:

By: _____

Thomas R. Pleuss

Attachments:

- Exhibit A - Legal description of the Property
- Exhibit B - List of permitted title encumbrances

EXHIBIT "A"

Legal Description

SCHEDULE A

Commitment No.- 05MO26512
Effective Date of Commitment- 5/16/2005 4:00:00 PM

Prepared For:
Mubarak, Radcliffe & Berry, S.C.
PO Box 110
917 Superior Avenue
Tomah, WI 54660-0110

Inquiries Should be Directed to:
Monroe County Abstract & Title Co., Inc.
PO Box 458 - 139 N. Court Street
Sparta, WI 54656
(608) 269-6781.

I. Policy or Policies to be issued:	<u>Amount</u>
(a) ALTA Owners Policy 1992 Proposed Insured: City of Tomah	\$15,000.00
(b) ALTA Loan Policy 1992 Proposed Insured: NONE	

2. The Estate or interest in the land described or referred to in this Commitment and covered herein is a Fee Simple

3. Title to said estate or interest in said land is at the effective date hereof of record in: Thomas R. Pleuss a/k/a Tom R. Pleuss a/k/a Tom Pleuss and Patricia A. Pleuss, his wife, as their interest may appear

4. The land referred to in this Commitment is located in the County of Monroe, State of Wisconsin, and described as follows:
The West Half of the Northeast Quarter of Northeast Quarter (W 1/2 of NE 1/4 of NE 1/4), Section Thirty-two (32), Township Eighteen (18) North, Range One (1) West, Monroe County, Wisconsin.

Shown For Information:
Parcel No. 020-01209-0000
2004 Tax \$1406.77 (No Lottery Credit)
Parcel No. 020-01210-0000
2004 Tax \$1627.24 - 80.39 (Lottery Credit) = \$1546.85

EXHIBIT "B"

Permitted Encumbrances

The policy or policies to be issued will contain exceptions to the following matters unless the same are disposed of to the satisfaction of the Company:

1. Defects, liens, encumbrances, adverse claims or other matters, if any, created, first appearing in the public records or attaching subsequent to the effective date hereof but prior to the date the proposed Insured acquires for value of record the estate or interest or mortgage thereon covered by this Commitment
2. Special taxes or assessments, if any, payable with the taxes levied or to be levied for the current and subsequent years.
3. Liens, hook-up charges or fees, deferred charges, reserve capacity assessments, impact fees, or other charges or fees due payable on the development or improvement of the Land, whether assessed or charged before or after the Date of Policy.
4. Any lien, or right to a lien, for services, labor, or material heretofore or hereafter furnished, imposed by law and not shown by the public records.
5. Rights or claims of parties in possession not shown by the public records.
6. Encroachments, overlaps, boundary line disputes, and any other matter which would be disclosed by an accurate survey and inspection of the premises.
7. Easements or claims of easements not shown by the public records.
8. Any claim of adverse possession or prescriptive easement
9. General Taxes for the year 2005 not yet due and payable.
10. 2004 taxes are postponed in the amount of \$813.62 – Computer No. 020-01210-0000
2004 taxes are postponed in the amount of \$703.38 – Computer No. 020-01209-0000
11. Public or private rights, if any, in such portion of the subject premises as may be used, laid out or dedicated in any manner whatsoever, for highway purposes.
12. Easement granted to North-West Telephone Company by an instrument dated Sept. 29, 1983 and recorded in the Office of the Register of Deeds for Monroe County, Wisconsin, on Oct. 11, 1983 at 8:30 A.M. in Vol. 37 Records on page 667 as Doc. No. 365707. (See copy attached)
13. Mortgage, according to the terms and provisions thereof, from Thomas R. Pleuss and Patricia A. Pleuss, his wife, as joint tenants, to Farmers & Merchants Bank, to secure the originally stated indebtedness of \$36,500.00 dated Apr. 9, 1990 and recorded in the office of the Register of Deeds for Monroe County, Wisconsin, on Apr. 18, 1990 at 3:15 P.M. in Vol. 113 Records on page 649 as Doc. No. 402968.
14. Mortgage, according to the terms and provisions thereof, from Thomas R. Pleuss and Patricia A. Pleuss, husband and wife, to Farmers & Merchants Bank, to secure the originally stated indebtedness of \$16,000.00 dated Oct. 27, 1999 and recorded in the office of the Register of Deeds for Monroe County, Wisconsin, on Nov. 4, 1999 at 10:40 A.M. in Vol. 302 Records on page 304 as Doc. No. 481976.
15. Mortgage, according to the terms and provisions thereof, from Thomas R. Pleuss and Patricia A. Pleuss, husband and wife, to Farmers & Merchants Bank, to secure the originally stated indebtedness of \$5,000.00 dated May 9, 2002 and recorded in the office of the Register of Deeds for Monroe County, Wisconsin, on May 15, 2002 at 9:20 A.M. in Vol. 392 Records on page 681 as Doc. No. 509910.
16. Mortgage, according to the terms and provisions thereof, from Thomas R. Pleuss and Patricia A.

Pleuss, husband and wife, to Farmers and Merchants Bank, to secure the originally stated indebtedness of \$15,000.00 dated July 25, 2003 and recorded in the office of the Register of Deeds for Monroe County, Wisconsin, on Aug. 1, 2003 at 10 A.M. as Doc. No. 527365.

17. Mortgage, according to the terms and provisions thereof, from Thomas R. Pleuss and Patricia A. Pleuss, husband and wife, to Farmers and Merchants Bank, to secure the originally stated indebtedness of \$38,000.00 dated Oct. 24, 2003 and recorded in the office of the Register of Deeds for Monroe County, Wisconsin, on Oct. 28, 2003 at 10:45 A.M. as Doc. No. 531176.

18. The State of Wisconsin owns the beds of navigable lakes and rivers in trust for the public. This policy does not insure title to any part of the Land described in Schedule A which is below the ordinary high water mark of Deer Creek.

Rights of the federal, state or local government, and other riparian owners, to regulate use of the shore and any riparian rights attached to the land.

The bed of Deer Creek may have moved because of the buildup of material at the shore (accretion), a change in the course of the water body (avulsion), a lowering of the water level (reliction), or removal of dry land by wave action (erosion). This policy does not insure title to any part of the Land described in Schedule A which has been added or lost because of accretion, avulsion, reliction, or erosion.

Rights of the State of Wisconsin and the public in any portion of the Land which has been created by artificial fill in the bed of Deer Creek.

TOMAH CITY ATTORNEY

917 SUPERIOR AVENUE

P.O. BOX 110

TOMAH, WI 54660

PENNY J. PRECOUR
CITY ATTORNEY

TELEPHONE (608) 372-2014
FACSIMILE (608) 372-2447

April 27, 2018

Mr. Roger L. Williams
23671 County Highway ET
Tomah, Wisconsin 54660

Re: City of Tomah Landfill

Dear Mr. Williams:

This letter is written in regards to the on-going remediation efforts at the Tomah Municipal Sanitary Landfill Superfund Site ("SITE"). In 2005, as part of the remedial action for the SITE, the Parties ("PRPs") provided notice to your predecessor that there was a potential for groundwater contamination at your property adjacent to the contamination plume. The PRPs further notified your predecessor that your private drinking water wells were impacted by the groundwater contamination. The PRPs did extend municipal water to your property at no cost to you. The PRPs retained one (1) private well for sampling purposes. You are reminded that remaining private well is not to be used for drinking water purposes.

In addition, the PRPs sought to have your predecessor execute and record an Environmental Protection Easement and Declaration of Restrictive Covenants ("EASEMENT") for your property nearby the SITE. A copy of the EASEMENT is attached. The EASEMENT was part of the Institutional Controls for the SITE. The purpose of this EASEMENT was to provide notice to future owners that a risk of groundwater contamination exists. Even though you have refused to sign the EASEMENT, you still have a legal obligation to notify future owners of this risk.

If you have any questions, please feel free to contact me directly. Thank you.

Very truly yours,

Penny J. Precour
City Attorney

PJP:cf

Enclosure

cc: Mr. Roger Gorius, City Administrator (via email - w/o encl.)
Mr. Ryan Aamot, GHD (via email - w/encl.)
Mr. Philip Slowiak, International Paper (via email - w/o encl.)

ENVIRONMENTAL PROTECTION EASEMENT
AND
DECLARATION OF RESTRICTIVE COVENANTS

Document Number

Document Title

COPY

1. This Environmental Protection Easement and Declaration of Restrictive Covenants is made this _____ day of June, 2005, by and between **ROGER WILLIAMS**, ("Grantor"), having an address of 23671 County Highway ET, Tomah, Wisconsin 54660, and **UNITED STATES OF AMERICA**, ("Grantee"), having an address of c/o U.S. Environmental Protection Agency, Region Five Administrator, 77 West Jackson Boulevard, Chicago, Illinois, 60604.

Recording Area

Name and Return Address

Richard A. Radcliffe
Mubarak, Radcliffe & Berry, S.C.
917 Superior Avenue
Post Office Box 110
Tomah, Wisconsin 54660-0110

WITNESSETH:

2. WHEREAS, Grantor is the owner of a parcel of land located in the County of Monroe, State of Wisconsin, more particularly described on Exhibit "A" attached hereto and made a part hereof (the "Property"); and

Parcel Identification Number (PIN)

3. WHEREAS, the Property is part of the Tomah Municipal Sanitary Landfill Superfund Site ("Site"), which the U.S. Environmental Protection Agency ("EPA"), pursuant to Section 105 of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9605, placed on the National Priorities List, set forth at 40 C.F.R. Part 300, Appendix B, by publication in the Federal Register on March 31, 1989, 54 Fed. Reg. 19, 526; and

4. WHEREAS, in a Record of Decision dated September 25, 1997, ("OUI ROD") and in a Record of Decision dated September 24, 2003 ("OU2 ROD") (the "ROD"), the EPA Region Five (5) Regional Administrator selected a "remedial action" for the Site, which provides, in part, for the following actions; and

5. WHEREAS, with the exception of the OU2 response action, the remedial action has been implemented at the Site; and

6. WHEREAS, the parties hereto have agreed 1) to grant a permanent right of access over the Property to the Grantee for the purposes of implementing, facilitating and monitoring the remedial action; and 2) to impose on the Property use restrictions as covenants that will run with the land for the purpose of protecting human health and the environment; and

THIS PAGE IS PART OF THIS LEGAL DOCUMENT – DO NOT REMOVE.

This information must be completed by submitter: document title, name & return address, and PIN (if required). Other information such as the granting clause, legal description, etc., may be placed on this first page of the document or may be placed on additional pages of the document.

WRDA Rev. 12/22/2010

7. **WHEREAS**, Grantor wishes to cooperate fully with the Grantee in the implementation of all response actions at the Site.

NOW, THEREFORE:

8. **Grant:** Grantor, on behalf of itself, its successors and assigns, in consideration of the terms of the Consent Decree in the Case of International Paper Company v. City of Tomah and United States Department of Veterans Affairs, Civil Action No. 00-C-0539-C and United States of America v. International Paper Company and City of Tomah, Civil Action No. 01-C-0693-C in the United States District Court for the Western District of Wisconsin, etc., does hereby covenant and declare that the Property shall be subject to the restrictions on use set forth below, and does give, grant and convey to the Grantee, and its assigns, with general warranties of title, 1) the perpetual right to enforce said use restrictions, and 2) an environmental protection easement of the nature and character, and for the purposes hereinafter set forth, with respect to the Property.

9. **Purpose:** It is the purpose of this instrument to convey to the Grantee real property rights, which will run with the land, to facilitate the remediation of past environmental contamination and to protect human health and the environment by reducing the risk of exposure to contaminants.

10. **Restrictions on Use:** The following covenants, conditions and restrictions apply to the use of the Property, run with the land and are binding on the Grantor:

- A. **Private Well Restrictions.** The Grantee hereby grants and conveys to the Grantor, their heirs, successors and assigns, a perpetual restriction that there shall be no private water well on the Property. All existing wells shall be abandoned. The grantee shall not use, or permit any person to use, water from a private well for any purpose. The Grantor, or its designee, shall have and retain the right to construct, maintain and/or replace monitoring wells on the Property as deemed necessary by the Grantor from time to time.
- B. **Municipal Water Supply.** The Grantee agrees to hook up to a municipal water supply in the event there is a need for residential water service to the Property in the future.
- C. **Other Action Inconsistent with Remedial Action.** The Grantee hereby agrees not to take any other action, and to refrain from using the Property in any manner, that would interfere with or adversely affect the implementation, integrity or protectiveness of the remedial actions on the Site as described above.

11. **Modification of Restrictions:** The above restrictions may be modified, or terminated in whole or in part, in writing, by the Grantee. If requested by the Grantor, such writing will be executed by Grantee in recordable form.

12. Environmental Protection Easement: Grantor hereby grants to the Grantee an irrevocable, permanent and continuing right of access at all reasonable times to the Property for the purposes of:

- a) Implementing the response actions in the ROD, including but not limited to Monitored Natural Attenuation (MNA);
- b) Verifying any data or information submitted to the EPA;
- c) Verifying that no action is being taken on the Property in violation of the terms of this instrument or of any federal or state environmental laws or regulations;
- d) Monitoring response actions on the Site and conducting investigations relating to contamination on or near the Site, including, without limitation, sampling of air, water, sediments, soils and specifically, without limitation, obtaining split or duplicate samples;
- e) Conducting periodic reviews of the remedial action, including but not limited to, reviews required by applicable statutes and/or regulations; and
- f) Implementing additional or new response actions if the Grantee, in its sole discretion, determines: i) that such actions are necessary to protect the environment because either the original remedial action has proven to be ineffective or because new technology has been developed which will accomplish the purposes of the remedial action in a significantly more efficient or cost effective manner; and ii) that the additional or new response actions will not impose any significantly greater burden on the Property or unduly interfere with the then existing uses of the Property.

13. Reserved Rights of Grantor: Grantor hereby reserves unto itself, its successors and assigns, all rights and privileges in and to the use of the Property which are not incompatible with the restrictions, rights and easements granted herein.

14. Nothing in this document shall limit or otherwise affect EPA's rights of entry and access or EPA's authority to take response actions under CERCLA, the NCP or other federal law.

15. No Public Access and Use: No right of access or use by the general public to any portion of the Property is conveyed by this instrument.

16. Notice Requirement: Grantor agrees to include in any instrument conveying any interest in any portion of the Property, including but not limited to Deeds, Leases and Mortgages, a notice which is in substantially the following form:

NOTICE: THE INTEREST CONVEYED HEREBY IS SUBJECT TO AN ENVIRONMENTAL PROTECTION EASEMENT AND DECLARATION OF RESTRICTIVE COVENANTS, DATED JUNE _____, 2005, RECORDED IN THE PUBLIC LAND RECORDS OF THE MONROE COUNTY REGISTER OF DEEDS ON JUNE _____, 2005, AS DOCUMENT NO. _____, IN FAVOR OF, AND ENFORCEABLE BY, THE UNITED STATES OF AMERICA.

Within thirty (30) days of the date any such instrument of conveyance is executed, Grantor must provide Grantee with a certified true copy of said instrument and, if it has been recorded in the public land records, its recording reference.

17. Administrative Jurisdiction: The federal agency having administrative jurisdiction over the interests acquired by the United States by this instrument is the EPA.

18. Enforcement: The Grantee shall be entitled to enforce the terms of this instrument by resort to specific performance or legal process. All remedies available hereunder shall be in addition to any and all other remedies at law or in equity, including CERCLA. Enforcement of the terms of this instrument shall be at the discretion of the Grantee, and any forbearance, delay or omission to exercise its rights under this instrument in the event of a breach of any term of this instrument shall not be deemed to be a waiver by the Grantee of such term or of any subsequent breach of the same or any other term, or of any of the rights of the Grantee under this instrument.

19. Damages: Grantee shall be entitled to recover damages for violations of the terms of this instrument, or for any injury to the remedial action, to the public or to the environment protected by this instrument.

20. Waiver of Certain Defenses: Grantor hereby waives any defense of laches, estoppel or prescription.

21. Covenants: Grantor hereby covenants to and with the United States and its assigns, that the Grantor is lawfully seized in fee simple of the Property, that the Grantor has a good and lawful right and power to sell and convey it or any interest therein, that the Property is free and clear of encumbrances, except those noted on Exhibit "B" attached hereto, and that the Grantor will forever warrant and defend the title thereto and the quiet possession thereof.

22. Notices: Any notice, demand, request, consent, approval or communication that either party desires or is required to give to the other shall be in writing and shall either be served personally or sent by first class mail, postage prepaid, addressed as follows:

To Grantor:

Roger L. Williams
23671 County Highway ET
Tomah, Wisconsin 54660

To Grantee:

U.S. Environmental Protection Agency
Region Five Administration
77 West Jackson Boulevard
Chicago, Illinois 60604

23. General Provisions:

a) Controlling Law: The interpretation and performance of this instrument shall be governed by the laws of the United States or, if there are no applicable federal laws, by the law of the state where the Property is located.

b) Liberal Construction: Any general rule of construction to the contrary notwithstanding, this instrument shall be liberally construed in favor of the Grantee to effect the purpose of this instrument and the policy and purpose of CERCLA. If any provision of this instrument is found to be ambiguous, an interpretation consistent with the purpose of this instrument that would render the provision valid shall be favored over any interpretation that would render it invalid.

c) Severability: If any provision of this instrument, or the application of it to any person or circumstance, is found to be invalid, the remainder of the provisions of this instrument, or the application of such provisions to persons or circumstances other than those to which it is found to be invalid, as the case may be, shall not be affected thereby.

d) Entire Agreement: This instrument sets forth the entire agreement of the parties with respect to rights and restrictions created hereby, and supersedes all prior discussions, negotiations, understandings or agreements relating thereto, all of which are merged herein.

e) No Forfeiture: Nothing contained herein will result in a forfeiture or reversion of Grantor's title in any respect.

f) Joint Obligation: If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

g) Successors: The covenants, terms, conditions and restrictions of this instrument shall be binding upon, and inure to the benefit of, the parties hereto and their respective personal representatives, heirs, successors and assigns and shall continue as a servitude running in perpetuity with the Property. The term "Grantor", wherever used herein, and any pronouns used in place thereof, shall include the persons and/or entities named at the beginning of this document, identified as "Grantor" and their personal representatives, heirs, successors and assigns. The term "Grantee", wherever used herein, and any pronouns used in place thereof, shall include the persons and/or entities named at the beginning of this document, identified as "Grantee" and their personal representatives, heirs, successors and assigns. The rights of the Grantee and Grantor under this instrument are freely assignable, subject to the notice provisions hereof.

h) Termination of Rights and Obligations: A party's rights and obligations under this instrument terminate upon transfer of the party's interest in the Easement or Property, except that liability for acts or omissions occurring prior to transfer shall survive transfer.

i) Captions: The captions in this instrument have been inserted solely for convenience of reference and are not a part of this instrument and shall have no effect upon construction or interpretation.

j) Counterparts: The parties may execute this instrument in two or more counterparts, which shall, in the aggregate, be signed by both parties; each counterpart shall be deemed an original instrument as against any party who has signed it. In the event of any disparity between the counterparts produced, the recorded counterpart shall be controlling.

TO HAVE AND TO HOLD unto the United States and its assigns forever.

IN WITNESS WHEREOF, Grantor has caused this Agreement to be signed in its name.

Executed this _____ day of June, 2005.

GRANTOR:

By: _____

Roger L. Williams

EXHIBIT "A"

Legal Description

595208

STATE BAR OF WISCONSIN FORM 2 - 2000
WARRANTY DEED

Document Number

REGISTER'S OFFICE
County of Monroe, WI

This Deed, made between Ruth A. Williams f/k/a Ruth A. Hanson,
a single person

Received for record this 21
day of May A.D., 2009
at 9:40 o'clock A.M.
Jill S. Sisk Register

Grantor, and Roger L. Williams, a single person as individual property

Jill Sisk
Jill Timberwood
0183

Grantee.

Grantor, for a valuable consideration, conveys and warrants to
Grantee the following described real estate in Monroe
County, State of Wisconsin (if more space is needed, please attach addendum.)

Recording Area

Name and Return Address
Timberwood Bank
PO Box 770
Tomah, WI 54660

Parcel 1:

Lot 2 of a Certified Survey Map recorded in Vol. 23 CSM on page 012 as Doc. No. 591560 located in the West One-half of the Southeast Quarter of Northeast Quarter (W 1/2 of SE 1/4 of NE 1/4), Section Thirty-two (32), Township Eighteen (18) North, Range One (1) West, Town of LaGrange, Monroe County, Wisconsin.

The grantor reserves for the grantor the right of first refusal if the grantee would sell this real estate. The grantee would provide written notice to the grantor of the grantee's decision to sell the real estate and provide a signed copy of the offer to purchase received. The grantor shall have 30 days after delivery of such notice and signed offer to purchase to accept the title provided by the grantee and make any objections to the merchantability of the title. The grantee would clear up any title defects and then 20 days thereafter the grantor has the option to provide an offer to purchase with the same terms and conditions and the grantee shall convey title to the property pursuant to the terms of the offer.

020-01215-0000

Parcel Identification Number (PIN)

This is not homesteaded property.
() (is not)

Parcel 2:

An easement for the benefit of Parcel 1 over and across the South 66 feet of Lot 1 of the Certified Survey Map recorded in Vol. 23 CSM on page 012 as Doc. No. 591560. This easement is for ingress and egress only. This easement shall run with the land described in Parcel 1 above. This easement is for the benefit of the grantee, their heirs, successors and assigns.

*Subject to Terms, Conditions, Restrictions and Provisions relating to the use and maintenance of the easement described as Parcel 2 of the subject premises.

*Subject to Public or private rights, if any, in such portion of the subject premises as may be used, laid out or dedicated in any manner whatsoever, for highway purposes.

*Subject to Easement granted to North-West Telephone Company by an instrument dated July 20, 1989 and recorded in the Office of the Register of Deeds for Monroe County, Wisconsin, on Aug. 4, 1989 at 8:30 A.M. in Vol. 165 Records on page 650 as Doc. No. 398954.

*Subject to Easement granted to Wisconsin Gas Company by an instrument dated Sept. 24, 1991 and recorded in the Office of the Register of Deeds for Monroe County, Wisconsin, on Sept. 30, 1991 at 8:30 A.M. in Vol. 150 of Records, on page 124, as Document No. 419877.

*Subject to Easement granted to City of Tomah by an instrument dated Feb. 10, 1999 and recorded in the Office of the Register of Deeds for Monroe County, Wisconsin, on Feb. 12, 1999 at 8:30 A.M. in Vol. 289 of Records, on page 559, as Document No. 473661.

Exceptions to warranties:

*Subject to easements and right of ways of record.

TRANSFER
\$39.90
FEE

Dated this 1st day of May, 2009

Ruth A. Williams
* Ruth A. Williams f/k/a Ruth A. Hanson

AUTHENTICATION

Signature(s)

authenticated this _____ day of _____, _____

ACKNOWLEDGMENT

STATE OF WISCONSIN)

Monroe) County)

Personally came before me this 1st day of May, 2009 the above named Ruth A. Williams f/k/a Ruth A. Hanson

TITLE: MEMBER STATE BAR OF WISCONSIN
(If not, authorized by § 706.06, Wis. Stats.)

THIS INSTRUMENT WAS DRAFTED BY
SHUDLICK LAW OFFICE
David A. Shudlick, Attorney

(Signatures may be authenticated or acknowledged. Both are not necessary.)

to me known to be the person(s) who executed the foregoing instrument and acknowledged the same.

Danielle H. Darmer
* Danielle H. Darmer

Notary Public, State of WISCONSIN

My Commission is permanent. (If not, state expiration date: October 03, 2010)

* Names of persons signing in any capacity must be typed or printed below their signature.

WARRANTY DEED

STATE BAR OF WISCONSIN
FORM No. 2 - 2000

INFO-PRO (608)555-2021 www.infoproforms.com

EXHIBIT "B"

Permitted Encumbrances

TOMAH CITY ATTORNEY

917 SUPERIOR AVENUE
P.O. BOX 110
TOMAH, WI 54660

PENNY J. PRECOUR
CITY ATTORNEY

TELEPHONE (608) 372-2014
FACSIMILE (608) 372-2447

April 27, 2018

*Ms. Ruth Williams
23671 County Highway ET
Tomah, Wisconsin 54660*

Re: City of Tomah Landfill

Dear Ms. Williams:

This letter is written in regards to the on-going remediation efforts at the Tomah Municipal Sanitary Landfill Superfund Site ("SITE"). In 2005, as part of the remedial action for the SITE, the Parties ("PRPs") notified you that there was a potential for groundwater contamination at your property adjacent to the contamination plume. The PRPs further notified you that your private drinking water wells were impacted by the groundwater contamination. The PRPs did extend municipal water to your property at no cost to you. The PRPs retained one (1) private well for sampling purposes. You are reminded that remaining private well is not to be used for drinking water purposes.

In addition, the PRPs sought to have you execute and record an Environmental Protection Easement and Declaration of Restrictive Covenants ("EASEMENT") for your property nearby the SITE. A copy of the EASEMENT is attached. The EASEMENT was part of the Institutional Controls for the SITE. The purpose of this EASEMENT was to provide notice to future owners that a risk of groundwater contamination exists. Even though you have refused to sign the EASEMENT, you still have a legal obligation to notify future owners of this risk.

If you have any questions, please feel free to contact me directly. Thank you.

Very truly yours,

*Penny J. Precour
City Attorney*

*PJP:cf
Enclosure*

*cc: Mr. Roger Gorius, City Administrator (via email - w/o encl.)
Mr. Ryan Aamot, GHD (via email - w/encl.)
Mr. Philip Slowiak, International Paper (via email - w/o encl.)*

ENVIRONMENTAL PROTECTION EASEMENT
AND
DECLARATION OF RESTRICTIVE COVENANTS

Document Number

Document Title

COPY

1. This Environmental Protection Easement and Declaration of Restrictive Covenants is made this _____ day of June, 2005, by and between RUTH A. HANSON, a/k/a RUTH HANSON, ("Grantor"), having an address of Post Office Box 554, Calmar, Iowa, 52132, and UNITED STATES OF AMERICA, ("Grantee"), having an address of c/o U.S. Environmental Protection Agency, Region Five Administrator, 77 West Jackson Boulevard, Chicago, Illinois, 60604.

WITNESSETH:

2. WHEREAS, Grantor is the owner of a parcel of land located in the County of Monroe, State of Wisconsin, more particularly described on Exhibit "A" attached hereto and made a part hereof (the "Property"); and

3. WHEREAS, the Property is part of the Tomah Municipal Sanitary Landfill Superfund Site ("Site"), which the U.S. Environmental Protection Agency ("EPA"), pursuant to Section 105 of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9605, placed on the National Priorities List, set forth at 40 C.F.R. Part 300, Appendix B, by publication in the Federal Register on March 31, 1989, 54 Fed. Reg. 19, 526; and

4. WHEREAS, in a Record of Decision dated September 25, 1997, ("OU1 ROD") and in a Record of Decision dated September 24, 2003 ("OU2 ROD") (the "ROD"), the EPA Region Five (5) Regional Administrator selected a "remedial action" for the Site, which provides, in part, for the following actions; and

5. WHEREAS, with the exception of the OU2 response action, the remedial action has been implemented at the Site; and

6. WHEREAS, the parties hereto have agreed 1) to grant a permanent right of access over the Property to the Grantee for the purposes of implementing, facilitating and monitoring the remedial action; and 2) to impose on the Property use restrictions as covenants that will run with the land for the purpose of protecting human health and the environment; and

7. WHEREAS, Grantor wishes to cooperate fully with the Grantee in the implementation of all response actions at the Site.

Recording Area

Name and Return Address
Richard A. Radcliffe
MUBARAK, RADCLIFFE & BERRY, S.C.
917 Superior Avenue
Post Office Box 110
Tomah, Wisconsin 54660

Parcel Identification Number (PIN)

This information must be completed by submitter: document title, name & return address, and PIN (if required). Other information such as the granting clauses, legal description, etc. may be placed on this first page of the document or may be placed on additional pages of the document.
Note: Use of this cover page adds one page to your document and \$2.00 to the recording fee. Wisconsin Statutes, 59.43(2m) WRDA 10/99

NOW, THEREFORE:

8. Grant: Grantor, on behalf of itself, its successors and assigns, in consideration of the terms of the Consent Decree in the Case of International Paper Company v. City of Tomah and United States Department of Veterans Affairs, Civil Action No. 00-C-0539-C and United States of America v. International Paper Company and City of Tomah, Civil Action No. 01-C-0693-C in the United States District Court for the Western District of Wisconsin, etc., does hereby covenant and declare that the Property shall be subject to the restrictions on use set forth below, and does give, grant and convey to the Grantee, and its assigns, with general warranties of title, 1) the perpetual right to enforce said use restrictions, and 2) an environmental protection easement of the nature and character, and for the purposes hereinafter set forth, with respect to the Property.

9. Purpose: It is the purpose of this instrument to convey to the Grantee real property rights, which will run with the land, to facilitate the remediation of past environmental contamination and to protect human health and the environment by reducing the risk of exposure to contaminants.

10. Restrictions on Use: The following covenants, conditions and restrictions apply to the use of the Property, run with the land and are binding on the Grantor:

- A. Private Well Restrictions. The Grantee hereby grants and conveys to the Grantor, their heirs, successors and assigns, a perpetual restriction that there shall be no private water well on the Property. All existing wells shall be abandoned. The grantee shall not use, or permit any person to use, water from a private well for any purpose. The Grantor, or its designee, shall have and retain the right to construct, maintain and/or replace monitoring wells on the Property as deemed necessary by the Grantor from time to time.
- B. Municipal Water Supply. The Grantee agrees to hook up to a municipal water supply in the event there is a need for residential water service to the Property in the future.
- C. Other Action Inconsistent with Remedial Action. The Grantee hereby agrees not to take any other action, and to refrain from using the Property in any manner, that would interfere with or adversely affect the implementation, integrity or protectiveness of the remedial actions on the Site as described above.

11. Modification of Restrictions: The above restrictions may be modified, or terminated in whole or in part, in writing, by the Grantee. If requested by the Grantor, such writing will be executed by Grantee in recordable form.

12. Environmental Protection Easement: Grantor hereby grants to the Grantee an irrevocable, permanent and continuing right of access at all reasonable times to the Property for the purposes of:

- a) Implementing the response actions in the ROD, including but not limited to Monitored Natural Attenuation (MNA);
- b) Verifying any data or information submitted to the EPA;
- c) Verifying that no action is being taken on the Property in violation of the terms of this instrument or of any federal or state environmental laws or regulations;
- d) Monitoring response actions on the Site and conducting investigations relating to contamination on or near the Site, including, without limitation, sampling of air, water, sediments, soils and specifically, without limitation, obtaining split or duplicate samples;
- e) Conducting periodic reviews of the remedial action, including but not limited to, reviews required by applicable statutes and/or regulations; and
- f) Implementing additional or new response actions if the Grantee, in its sole discretion, determines: i) that such actions are necessary to protect the environment because either the original remedial action has proven to be ineffective or because new technology has been developed which will accomplish the purposes of the remedial action in a significantly more efficient or cost effective manner; and ii) that the additional or new response actions will not impose any significantly greater burden on the Property or unduly interfere with the then existing uses of the Property.

13. Reserved Rights of Grantor: Grantor hereby reserves unto itself, its successors and assigns, all rights and privileges in and to the use of the Property which are not incompatible with the restrictions, rights and easements granted herein.

14. Nothing in this document shall limit or otherwise affect EPA's rights of entry and access or EPA's authority to take response actions under CERCLA, the NCP or other federal law.

15. No Public Access and Use: No right of access or use by the general public to any portion of the Property is conveyed by this instrument.

16. Notice Requirement: Grantor agrees to include in any instrument conveying any interest in any portion of the Property, including but not limited to Deeds, Leases and Mortgages, a notice which is in substantially the following form:

NOTICE: THE INTEREST CONVEYED HEREBY IS SUBJECT TO AN ENVIRONMENTAL PROTECTION EASEMENT AND DECLARATION OF RESTRICTIVE COVENANTS, DATED JUNE _____, 2005, RECORDED IN THE PUBLIC LAND RECORDS OF THE MONROE COUNTY REGISTER OF DEEDS ON JUNE _____, 2005, AS DOCUMENT NO. _____, IN FAVOR OF, AND ENFORCEABLE BY, THE UNITED STATES OF AMERICA.

Within thirty (30) days of the date any such instrument of conveyance is executed, Grantor must provide Grantee with a certified true copy of said instrument and, if it has been recorded in the public land records, its recording reference.

17. Administrative Jurisdiction: The federal agency having administrative jurisdiction over the interests acquired by the United States by this instrument is the EPA.

18. Enforcement: The Grantee shall be entitled to enforce the terms of this instrument by resort to specific performance or legal process. All remedies available hereunder shall be in addition to any and all other remedies at law or in equity, including CERCLA. Enforcement of the terms of this instrument shall be at the discretion of the Grantee, and any forbearance, delay or omission to exercise its rights under this instrument in the event of a breach of any term of this instrument shall not be deemed to be a waiver by the Grantee of such term or of any subsequent breach of the same or any other term, or of any of the rights of the Grantee under this instrument.

19. Damages: Grantee shall be entitled to recover damages for violations of the terms of this instrument, or for any injury to the remedial action, to the public or to the environment protected by this instrument.

20. Waiver of Certain Defenses: Grantor hereby waives any defense of laches, estoppel or prescription.

21. Covenants: Grantor hereby covenants to and with the United States and its assigns, that the Grantor is lawfully seized in fee simple of the Property, that the Grantor has a good and lawful right and power to sell and convey it or any interest therein, that the Property is free and clear of encumbrances, except those noted on Exhibit "B" attached hereto, and that the Grantor will forever warrant and defend the title thereto and the quiet possession thereof.

22. Notices: Any notice, demand, request, consent, approval or communication that either party desires or is required to give to the other shall be in writing and shall either be served personally or sent by first class mail, postage prepaid, addressed as follows:

To Grantor:

Ruth A. Williams
Post Office Box 554
Calmer, Iowa 52132

To Grantee:

U.S. Environmental Protection Agency
Region Five Administration
77 West Jackson Boulevard
Chicago, Illinois 60604

23. General Provisions:

a) Controlling Law: The interpretation and performance of this instrument shall be governed by the laws of the United States or, if there are no applicable federal laws, by the law of the state where the Property is located.

b) Liberal Construction: Any general rule of construction to the contrary notwithstanding, this instrument shall be liberally construed in favor of the Grantee to effect the purpose of this instrument and the policy and purpose of CERCLA. If any provision of this instrument is found to be ambiguous, an interpretation consistent with the purpose of this instrument that would render the provision valid shall be favored over any interpretation that would render it invalid.

c) Severability: If any provision of this instrument, or the application of it to any person or circumstance, is found to be invalid, the remainder of the provisions of this instrument, or the application of such provisions to persons or circumstances other than those to which it is found to be invalid, as the case may be, shall not be affected thereby.

d) Entire Agreement: This instrument sets forth the entire agreement of the parties with respect to rights and restrictions created hereby, and supersedes all prior discussions, negotiations, understandings or agreements relating thereto, all of which are merged herein.

e) No Forfeiture: Nothing contained herein will result in a forfeiture or reversion of Grantor's title in any respect.

f) Joint Obligation: If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

g) Successors: The covenants, terms, conditions and restrictions of this instrument shall be binding upon, and inure to the benefit of, the parties hereto and their respective personal representatives, heirs, successors and assigns and shall continue as a servitude running in perpetuity with the Property. The term "Grantor", wherever used herein, and any pronouns used in place thereof, shall include the persons and/or entities named at the beginning of this document, identified as "Grantor" and their personal representatives, heirs, successors and assigns. The term "Grantee", wherever used herein, and any pronouns used in place thereof, shall include the persons and/or entities named at the beginning of this document, identified as "Grantee" and their personal representatives, heirs, successors and assigns. The rights of the Grantee and Grantor under this instrument are freely assignable, subject to the notice provisions hereof.

h) Termination of Rights and Obligations: A party's rights and obligations under this instrument terminate upon transfer of the party's interest in the Easement or Property, except that liability for acts or omissions occurring prior to transfer shall survive transfer.

i) Captions: The captions in this instrument have been inserted solely for convenience of reference and are not a part of this instrument and shall have no effect upon construction or interpretation.

j) Counterparts: The parties may execute this instrument in two or more counterparts, which shall, in the aggregate, be signed by both parties; each counterpart shall be deemed an original instrument as against any party who has signed it. In the event of any disparity between the counterparts produced, the recorded counterpart shall be controlling.

TO HAVE AND TO HOLD unto the United States and its assigns forever.

IN WITNESS WHEREOF, Grantor has caused this Agreement to be signed in its name.

Executed this _____ day of June, 2005.

GRANTOR:

By: _____

Ruth A. Williams

EXHIBIT "A"

Legal Description

SCHEDULE A

Commitment No.- 05MO26515
Effective Date of Commitment - 5/17/2005 4:00:00 PM

Prepared For:

Mubarak, Radcliffe & Berry, S.C.
PO Box 110
917 Superior Avenue
Tomah, WI 54660-0110

Inquiries Should be Directed to:

Monroe County Abstract & Title Co., Inc.
PO Box 458 - 139 N. Court Street
Sparta, WI 54656
(608) 269-6781

1. Policy or Policies to be issued:

Amount

(a) ALTA Owners Policy 1992
Proposed Insured:

\$15,000.00

City of Tomah

(b) ALTA Loan Policy 1992
Proposed Insured:

\$0.00

NONE

2. The Estate or interest in the land described or referred to in this Commitment and covered herein is a
Fee Simple

3. Title to said estate or interest in said land is at the effective date hereof of record in:
Ruth A. Hanson a/k/a Ruth Hanson

4. The land referred to in this Commitment is located in the County of Monroe, State of Wisconsin, and described as follows:

West one-half of the Southeast Quarter of the Northeast Quarter (W 1/2 of SE 1/4 of NE 1/4) of Section Thirty-two (32), Township Eighteen (18) North, Range One (1) West, excepting lands sold to Monroe County in Vol. 104 of Records at page 779.

Shown for Information

Parcel ID: 020-01215-0000

2004 Tax \$2204.52 - No Lottery Credit

EXHIBIT "B"

Permitted Encumbrances

The policy or policies to be issued will contain exceptions to the following matters unless the same are disposed of to the satisfaction of the Company:

1. Defects, liens, encumbrances, adverse claims or other matters, if any, created, first appearing in the public records or attaching subsequent to the effective date hereof but prior to the date the proposed Insured acquires for value of record the estate or interest or mortgage thereon covered by this Commitment
2. Special taxes or assessments, if any, payable with the taxes levied or to be levied for the current and subsequent years.
3. Liens, hook-up charges or fees, deferred charges, reserve capacity assessments, impact fees, or other charges or fees due payable on the development or improvement of the Land, whether assessed or charged before or after the Date of Policy.
4. Any lien, or right to a lien, for services, labor, or material heretofore or hereafter furnished, imposed by law and not shown by the public records.
5. Rights or claims of parties in possession not shown by the public records.
6. Encroachments, overlaps, boundary line disputes, and any other matter which would be disclosed by an accurate survey and inspection of the premises.
7. Easements or claims of easements not shown by the public records.
8. Any claim of adverse possession or prescriptive easement
9. General Taxes for the year 2005 not yet due and payable.
10. Easement to North-West Telephone Company by an instrument dated July 20, 1989 and recorded in the Office of the Register of Deeds for Monroe County, Wisconsin on Aug. 4, 1989 at 8:30 A. M. in Vol. 105 of Records at page 650 as Document Number 398954. (See copy attached)
11. Easement to Wisconsin Gas Company by an instrument dated Sept. 24, 1992 and recorded in the Office of the Register of Deeds for Monroe County, Wisconsin on Sept. 30, 1992 at 8:30 A. M. in Vol. 150 of Records at page 124 as Document Number 419877. (See copy attached)
12. Mortgage, according to the terms and provisions thereof, from Ruth A. Williams, a single individual to Acuity Bank, SSB to secure the originally stated indebtedness of \$38,000.00 dated Aug. 13, 2001 and recorded in the Office of the Register of Deeds for Monroe County, Wisconsin on Aug. 29, 2001 at 9:10 A. M. in Vol. 358 of Records at page 276 as Document Number 500590.
13. Mortgage, according to the terms and provisions thereof, from Ruth A. Williams a single individual to Acuity Bank, to secure the originally stated indebtedness of \$13,897.00 dated Dec. 17, 2004 and recorded in the Office of the Register of Deeds for Monroe County, Wisconsin on Dec. 27, 2004 at 10:32 A. M. as Document Number 545176.
14. Taxes for the year 2004 are postponed with a balance of \$1701.10 - Parcel ID: 020-01215-0000.

Attachment F
Figures and ESRI Polygon Shape Files
On Compact Disc
(not included in this pdf)