

Expanded Prohibition Zone

Well ID Report

September 6, 2011

Expanded Prohibition Zone Well ID Report

The Expanded Prohibition Zone Well Identification Work Plan approved by the Michigan Department of Natural Resources and Environment (MDNRE), now the Michigan Department of Environmental Quality (MDEQ), on February 4, 2011 identified the procedures Pall Life Sciences (PLS) would implement to determine the presence of private water wells located within the Expanded Prohibition Zone (EPZ). These tasks were accomplished as follows:

TASK 1: PLS will publish a DNRE-approved Legal Notice of the expansion of the Prohibition Zone in a manner consistent with the procedures followed when the Prohibition Zone was established. PLS will provide a copy of the Court's Order approving the new boundaries, the Groundwater Prohibition Order and a map depicting the expanded Prohibition Zone to the relevant municipal offices.

The MDEQ placed a Legal Notice in the print copy of AnnArbor.com on March 20, 2011 for which PLS paid directly to AnnArbor.com. (Attachment 1)

TASK 2: The following properties within the expanded portion of the Prohibition Zone ("Expanded Area") are currently serviced by private drinking water wells:

**545 Allison Dr.
427 Barber Ave
3225 Dexter
3249 Dexter
3313 Dexter
305 Pinewood**

Upon approval of the comprehensive modifications, PLS will provide a connection to municipal water for each of these properties and properly abandon (plug) the old well with the assistance of licensed water well contractor. PLS understands that the MDNRE has not made any effort to pre-approve this list of addresses and that it will do so after PLS files its report.

Although PLS was not required to connect the homes at these addresses to sewer, PLS paid for the connection to both water and sewer. The homes were connected to City water and sewer by contractors hired by PLS. A licensed water well contractor plugged the wells at these properties. Abandonment logs will be furnished as soon as they have been provided by the contractor.

TASK 3: The following properties are currently being serviced by municipal water, but have private wells that were kept in service for groundwater monitoring purposes:

544 Allison
593 Allison
430 Barber East & West
435 Barber
476 Barber
486 Barber
440 Clarendon
456 Clarendon
573 Dellwood (MW-KD1s & d in driveway)
2643 Dexter
2652 Dexter
2690 Dexter
2819 Dexter
3161 Dexter
3245 Kingwood
3250 Kingwood
441 Parkwood
354 Pinewood
373 Pinewood shallow & deep
350 Rose
2950 Valley

Subject to being granted access, PLS will contract with a licensed well contractor to plug the wells on these properties unless they continue to be part of PLS' approved monitoring plan or unless one of the exceptions listed in paragraph five of the Court's Groundwater Prohibition Order applies. PLS understands that the MDNRE has not made any effort to pre-approve this list of addresses and that it will do so after PLS files its report.

On July 20, 2011, PLS mailed letters to the property owners and residents at each of the non-highlighted addresses and several others in this category that were identified after approval of PLS' Well ID Work Plan requesting access to abandon the wells. Attachment 2 identifies the properties for which permission to abandon the wells has been granted. A licensed well contractor will be hired to plug each of the wells PLS has been authorized to abandon. PLS is seeking approval of an exception with regard to the highlighted addresses above and several additional wells as identified in Attachment 3. This list of requested exceptions was previously provided to the MDEQ

TASK 4: PLS will review available governmental records/databases to locate any well plugging/abandonment records for properties located within the Expanded Area.

Abandonment records found are provided as Attachment 4. However, governmental records are not complete and do not exist for many of the older properties. Also included in this Attachment are abandonment logs for wells PLS had previously used.

TASK 5: PLS will utilize the previously agreed upon methodology to determine if properties within the Expanded Area were developed: a) within the City limits; b) at locations where City water was available; and c) at a time when connection to City water was legally required. For all such properties that meet all of these conditions, no further action will be required.

PLS provides copies of plat maps for those areas included in the Expanded Area as Attachment 5. As provided in the original Well ID Report for the Prohibition Zone, after 1945 local laws and ordinances required homes built in the City to connect to municipal water when it was available. Consequently, it was agreed that houses built inside the City after that date with municipal water present at the time of construction would not have been serviced by a private well. Properties in this category are identified in the spreadsheet attached as Attachment 8.

TASK 6: PLS will review the remaining areas/properties to determine if the properties were developed within one year of the original “tap dates” and/or the first date the City billed the property for water service. PLS understands that the MDNRE will require corroborating evidence in addition to the original “tap date” in order to prove that the property was connected to City water within a year of being built. If appropriate corroborating evidence is not available the owner of the property will be surveyed. Consistent with the previously agreed upon procedures, no further action will be required for properties where it can be confirmed the building was connected to City water within a year of being built.

PLS reviewed on-line records from the City to determine when the homes were built. If City water was not available at that time, PLS sent a survey to the property owner and resident (if applicable). Properties in this category are identified in the spreadsheet attached as Attachment 8.

TASK 7: If there is a gap of more that one year (that is otherwise not explainable), this would indicate that the property was likely to have been serviced by a private well at one time. PLS will survey all such properties under the procedures described below, with the exception of properties for which well plugging/abandonment records confirm that the well has been plugged. The survey and cover letter that will be mailed to the owner and (if different than the owner) the resident of vulnerable properties is attached. Consistent with past procedures, a copy of the Groundwater Prohibition Order will be included along with a map of the expanded Prohibition Zone and will be mailed to the property address (and to the owner’s address of record if different). The cover letter will also include PLS’ request for permission to inspect the exterior of the property for wells.

Current owners were determined and, if their mailing address differed from the property in question, a survey was also sent to the “Resident”. The survey and cover letter were provided to all of those surveyed, along with a copy of the Groundwater Prohibition Order, map of the EPZ and self-addressed, stamped envelope. A copy of these items is provided, along with a list of the surveyed properties in Attachment 6. Prior to mailing the surveys, PLS presented a draft of this list to the MDEQ for comment. PLS requests that the attached list, which includes the names of the owners not be included in any copy of this report that is disseminated under the Freedom of Information Act. In particular, PLS requests that this list not be included in the MDEQ’s website for this Site. The MDEQ placed a copy of the draft list PLS provided to the MDEQ on the website without redacting the names of the owners/residents.

TASK 8: For each property that is confirmed to be using a private drinking water well for drinking water purposes by the procedures described above, PLS will provide a connection to municipal water and properly abandon the old well. For each private non-drinking water well that is identified by the above described procedures, PLS will properly plug the well unless PLS chooses to petition the Court to clarify whether its Groundwater Prohibition Order requires PLS to abandon such non-drinking water wells. Prior to abandoning/plugging of any well, PLS will attempt to obtain a groundwater sample from the well for analysis, unless a recent (within 6 months) sample result from the well in question is available.

PLS has provided connection to the six previously identified homes with private water supply wells to both City water and sewer. PLS continues to receive responses to the surveys, but thus far no drinking water wells and only a few non-drinking water wells have been identified. PLS will continue to review any surveys that are returned after the date of this report and will take further action as warranted, including supplementing this report with any new information.

TASK 9: At the conclusion of this effort, PLS will provide the DNRE with the following:

- a. **Plat maps identifying the subdivisions that were determined not to be vulnerable because they were developed at a time when connection to City water was legally required;**

See Attachment 5

- b. **A detailed explanation of how PLS determined which properties are vulnerable and need to be surveyed;**

Utilizing tools available through the Washtenaw County and the City of Ann Arbor websites, PLS created a spreadsheet showing the addresses of all homes

located within the EPZ and the dates they were built. Plat maps were obtained for the subdivisions located within the EPZ. For those homes built within subdivisions platted within the City limits, it was determined that these would have been connected to City water when built. Properties not within the City limits when built were surveyed.

Surveys returned as of the date of this Report are attached. See Attachment 7.

c. All relevant well plugging/abandonment records;

See Attachment 4. Additional well abandonment records will be supplied as they are received.

d. Proof that the survey documentation was served on the relevant owners in an envelope with PLS' return address and copies of any surveys that are returned;

See Attachment 6.

e. Copies of any written responses to the Public Notice that PLS receives;

See Attachment 7.

f. The results of any samples obtained from the wells that PLS identifies;

These will be provided for wells to be plugged that have not been sampled within the past 6 months.

g. A spreadsheet that summarizes the disposition of the properties not included in the plat maps provided in 10.a., including the basis for not surveying any of those properties (if any);

See Attachment 8.

h. A short narrative report summarizing the results of PLS' investigation.

PLS continues to receive responses to the Surveys mailed. PLS will supplement this report to include this narrative at the point when it appears that all of the survey responses have been received.

Attachments:

1. Copy of Legal Notice
2. Copy of letter requesting permission to enter property to abandon wells
List of recipient addresses with returned letters noted
3. List of exceptions submitted to MDEQ
4. Abandonment Logs
5. Plat maps
6. Cover Letter & Survey
Groundwater Prohibition Order with map of the EPZ
List of addresses
Copy of envelope
7. Surveys returned to date
8. Spreadsheets – with information to date