



June 26, 2024

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Ms. Hayley Huntley  
Indiana Department of Environmental Management  
Office of Land Quality – State Cleanup Section  
100 North Senate Avenue  
Indianapolis, Indiana 46204

**Subject: Response to Comment #3 / Unified Development Ordinance Letter  
Former Armstrong Cleaners – 48 South Eighth Street, Richmond, Indiana  
IDEM State Cleanup Site #200912040  
SE SCIENCES PROJECT # 10475-18-331**

Dear Ms. Huntley:

On behalf of Armstrong Cleaners c/o Nicholas Gahl, its counsel, Specialty Earth Sciences, LLC (SE Sciences) has prepared this *Response to Comment #3/Unified Development Ordinance Letter*. On May 13, 2024, the Indiana Department of Environmental Management (IDEM) issued a letter (**Attachment A**) requesting multiple items to achieve regulatory closure.

Comment #3 of the IDEM letter is the focus of this letter, whereas other IDEM comments will be addressed in separate correspondence. Below is Comment #3 for reference.

*“3. Lines of evidence (LOEs) for Site closure have been provided in the Closure Request. Furthermore, SES requested Site closure using an Environmental Restrictive Covenant (ERC) and Environmental Restrictive Ordinance (ERO). The existing on-Site ERC which restricts residential use, groundwater use, and has vapor intrusion contingencies (VFC #82751798), is acceptable for the on-Site exposure risks. In addition, SES proposes to rely on the City of Richmond Unified Development Ordinance (Richmond Ordinance) to mitigate off-Site exposure risks (VFC #83472542, beginning on page 448). This ordinance is not legally sufficient and can only be used as a LOE to support Site closure when plume stability has been demonstrated and SES has provided an acceptable response to the ERO Request for Information (see Attachment A).”*

Below is site specific information requested by IDEM. Each IDEM request is presented in italics followed by SE Sciences responses.

**1. Site Information:**

- a. Provide the Site Name, IDEM Program overseeing remediation at the site, IDEM Site Number (and FID if applicable), Site Address including City and County.*

Response: Armstrong Cleaners; State Cleanup Section; Incident #200912040; 48 South 8<sup>th</sup> Street, Richmond, Wayne County, Indiana.

- b. Provide a list of contaminants exceeding unconditional groundwater published levels.*

Response: Tetrachloroethene (PCE), Trichloroethene (TCE), and cis-1,2-Dichloroethene (cDCE)

- c. Provide a map of the Site depicting the interpreted extents of the contaminated groundwater plume, using isopleth lines where contamination exceeds IDEM's unconditional published levels.*

Response: See **Attachment B (Figure 1, PCE Plume Map - February 2024)** for a graphical depiction of the contaminated groundwater plume.

- d. Provide a list of property addresses and parcel numbers where contaminated groundwater is located and therefore where this ordinance will be used as a method to prevent an unacceptable risk of exposure to the contaminated groundwater.*

Response: 48 South 8<sup>th</sup> Street; Parcel # 89-18-05-220-312.000-030 (subject property)  
700 South A Street; Parcel # 89-18-05-220-313.000-030 (neighboring site)

**2. Ordinance Information:**

- a. Provide the name of the ordinance, date the ordinance was passed, ordinance number, the IDEM VFC# and any other web address where a copy of the ordinance can be found.*

Response: The *City of Richmond Unified Development Ordinance (UDO)* can be accessed via the following link:

<https://www.richmondindiana.gov/resources/unified-development-ordinance>

Just recently, this *UDO* was cited by Armstrong Cleaners for a different incident number and approved by IDEM as being sufficient. See IDEM's letter to City of Richmond dated April 4, 2024 (VFC# [83620306](#)).

Additionally, the following information was recently obtained from the City of Richmond’s website:

“On Monday, August 21, 2023, Richmond’s Common Council voted to approve Ordinance 22-2023, A General Ordinance Amending Chapter 154: Unified Development Ordinance. Originally adopted in 2010, the UDO has been amended twice before, with a substantial set of revisions in 2015 and an additional text amendment in 2020. In the 2023 update, Common Council considered 57 amendments that primarily represent one-off modifications to the use or development of zoning districts.”

b. Provide a map depicting the ERO coverage area.

Response: According to the UDO, Section 1.09 Ordinance Jurisdictional Area: “This UDO applies to all land within the corporate limits of Richmond, Indiana.” Richmond city limits are depicted on the “Official Zoning Map”, obtained from the City’s website, and included in **Appendix C**.

**3. Stakeholder Information:**

a. Provide a point of contact (name, title, organization, and contact information) within the ERO governing body so that IDEM can make the written notice described in Indiana Code (IC) 36-1-6-11 €. This point of contact should be, as appropriate, the President of the Board of County Commissioners, the President of the City County Council, President of the Common Council or Town Council, President of the township Board, President of the governing body, or chief executive officer of any other political subdivision that does not have a governing body.

Response: The City of Richmond may be contacted through its legal counsel:

Kimberly A. Vessels  
Assistant City Attorney  
City of Richmond, Indiana  
50 North 5<sup>th</sup> Street  
Richmond, IN 47374  
765-983-7220  
[kvessels@richmondindiana.gov](mailto:kvessels@richmondindiana.gov)

The current legislative body contact information is available for each member by accessing: <https://www.richmondindiana.gov/city-council>.

b. Provide contact information for any other relevant stakeholders. This may include the water utility, county health department, economic development organization, permit authorities, or any other public entity that may need to be made aware of the reliance on the ordinance.

Response: The point of contact for the City of Richmond Engineering Department is as follows:

Greg Stiens  
City of Richmond, Engineering  
50 North 5<sup>th</sup> Street  
Richmond, IN 47374  
765-983-7394  
[gstiens@richmondindiana.gov](mailto:gstiens@richmondindiana.gov)

**4. Planned Groundwater Resource Use:**

- a. *Provide information about any future planned resource use of groundwater as a municipal water supply or other potable use supply, in or adjacent to the local area covered by the ordinance.*

Response: Included in **Appendix D** is a copy of the City's *Aquifer Protection Overlay*, which is included in the *UDO*. According to this section of the *UDO*, "The intent of this District is to guide development and existing uses in those areas where an aquifer has been identified as deserving of detailed standards because of the existence of a wellfield providing potable water to the local water utility."

**5. Knowledge of Existing Wells:**

- a. *Does the ordinance explicitly address wells that may have existed before the ordinance was passed.*

Response: In addition to the *UDO* having Article 8 Nonconformances, the *UDO* is clear with its statement that "a private well for potable water shall not be permitted inside the Richmond City Limits."

- b. *Provide information regarding the number, location, and type (potable, industrial, etc.) of existing wells within a one-mile radius of the contaminated groundwater plume. Note that the Indiana Department of Natural Resources water well database may not be a complete record of existing wells. Please identify additional resources utilized in obtaining this information.*

Response: See **Appendix E** for a current copy of the Indiana Department of Natural Resources (IDNR) *1 Mile Radius Well Record Report* for the area surrounding the site. Two (2) water supplies wells (Reference #232938/purple square and Reference Number #407138/blue square) were identified on the IDNR map and are located greater than 1,000 feet west of the former Armstrong Cleaners property.

During a prior site visit, indications of water supply wells were not evident. Furthermore, as indicated elsewhere in this document, municipal water is supplied to this area.



- c. *Identify whether the contaminated groundwater plume is within or near a Wellhead Protection Area.*

Response: Included in **Appendix F** is a copy of the recently downloaded IDEM Source Water Proximity map indicating, “Your point or land parcel is NOT within a Wellhead Protection Area”, and “Your point or land parcel is NOT within a Source Water Area”.

**6. Exemptions or Variances Granted:**

- a. *Please provide information regarding any variances or special use exceptions that may have been granted allowing the installation of wells since the ordinance was enacted. In addition, please provide the criteria used by the governing body to evaluate applications for exception to or variance from the prohibition for well installation.*

Response: We are not aware of any specific use exceptions. The UDO, Article 9, Section 9.18 Variance, describes the process for addressing a variance.

**7. Enforcement:**

- a. *Describe the procedures and resources the governing body will use to enforce the ERO.*

Response: The City of Richmond’s UDO, Article 7, Design Standards; Section 7.33 UT-01: Utility Standards; A. Project Applicability; 2. Water. The following is described therein (emphasis added):

2. *Water: Water utility infrastructure, including potable water and fire protection, shall be provided in subdivisions, sites subject to development plan approval, and planned developments, and a connection from the new water utility infrastructure to an existing public water system shall be required, with the following exception:*

- a. *A private well may be permitted within the City's extra-territorial jurisdiction if:*

- i. *The nearest accessible water line is 300 feet or more from the edge of the new development, and*  
ii. *The cost of connecting to the water system is three times the cost to install all components of a private well, and*  
iii. *The private well's design and location is approved by the City Engineer and the Wayne County Health Department.*

- b. *A private well for potable water shall not be permitted inside the Richmond City Limits.*

Furthermore, the City of Richmond also directed us to the following section of the *UDO, Section 5.71 SW-01; Sewer and Water Standards*. The following is described therein:

2. *Water:*

*a. Connection to the Indiana American Water Company's water system shall be per each two-page layout in Article 2: Zoning Districts. Details about the terminology on the two-page layouts is as follows.*

*i. Required: Required means a connection to the Indiana American Water Company's water system shall be required.*

*ii. Required Where Available: Required where available means a connection to the Indiana American Water Company's water system shall be required when access to the water system is available within 300 feet or less of the property line.*

Based on our review of the City of Richmond *UDO*, we interpret the above sections as being applicable to the subject property and surrounding area as the following applies:

- The subject property and surrounding area are located within the Richmond City Limits.
- *Section 7.33 UT-01: Utility Standards* is applicable to all eleven (11) types of development; refer to the top of Page 7-39 for applicability, and Page 7-03 for a depiction of the “Icon Keys” associated with the types of developments.
- *Section 5.71 SW-01: Sewer and Water Standards* is applicable to all twenty-three (23) types of development; refer to the top of Page 5-66 for applicability, and Page 5-03 for a depiction of the “Icon Keys” associated with the types of developments.
- Municipal water, and other municipally provided utilities, are connected to the site building and surrounding properties.
- To our knowledge no property near the site is connected to a water supply well.

In conclusion, the City of Richmond ordinances function as an ERO because they are protective of contact with groundwater and the residual chlorinated volatile organic compound (cVOC) contaminants detected at the site and surrounding area. These ordinances prohibit the use of a private well for potable water inside the Richmond City Limits and require connection to the Indiana American Water Company’s water utility because the water system is available within 300 feet or less of the property lines.

Like IDEM did with respect to this *UDO* for supporting closure of the VRP #6160129, Armstrong Cleaners requests that IDEM be consistent in its approval of the *UDO* as part of the closure for this State Cleanup matter.

Please do not hesitate to contact either of the undersigned should any questions or concerns arise regarding this report.

Sincerely,  
SPECIALTY EARTH SCIENCES, LLC



Eric S. Lewis, LPG  
Senior Geologist



P. Cory Smith  
Senior Project Manager

Attachments:

- Attachment A IDEM Comment Letter
- Attachment B Figure 1, PCE Plume Map (February 2024)
- Attachment C Richmond Official Zoning Map
- Attachment D Richmond Aquifer Protection Overlay District Documentation
- Attachment E IDNR Water Well Viewer Map
- Attachment F IDEM Source Water Proximity Map

## **ATTACHMENT A**

### *IDEM COMMENT LETTER*



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204  
(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

**Eric J. Holcomb**  
Governor

**Brian C. Rockensuess**  
Commissioner

May 13, 2024

## VIA EMAIL

Armstrong Cleaners  
c/o Nicholas Gahl, Esq., Gahl Legal Group  
90 East Cedar Street  
Zionsville, IN 46077  
Email: [nick@gahllegal.com](mailto:nick@gahllegal.com)

### Re: **Quarterly Monitoring Report - Third Quarter 2023 – First Quarter 2024 & Request For Closure**

Former Armstrong Cleaners  
48 South 8th Street  
Richmond, Wayne County  
State Cleanup Site #200912040

Dear Mr. Gahl:

The Indiana Department of Environmental Management (IDEM) has reviewed the *Quarterly Monitoring Report - Third Quarter 2023 – First Quarter 2024 & Request for Closure* (Closure Request), prepared and submitted by Specialty Earth Sciences, LLC (SES). The Closure Request was submitted in response to a release(s) of hazardous substances at the Former Armstrong Cleaners located at 48 South 8th Street, Richmond, Wayne County, Indiana (Site). The Closure Request is available in IDEM's Virtual File Cabinet (VFC) as document # [83615862](#). The VFC is located on IDEM's website at <https://vfc.idem.in.gov/>.

The document was evaluated based on IDEM's *Risk-based Closure Guide* ("RCG" or "R2") and *State Cleanup Program Guide* non-rule policy documents and *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (SW846) Third Edition, Update III. Non-rule policy documents are located at: <https://www.in.gov/idem/resources/nonrule-policies/effective-nonrule-policies/>. Based on the data submitted, further environmental restrictive ordinance (ERO) information is needed, and additional actions must be taken to address the vapor exposure pathway. The following IDEM comments must be addressed:

### Comments

1. Nine selected wells were sampled using the low-flow or bailer methodology and the groundwater samples were analyzed for the short list of chlorinated volatile organic compounds (VOCs) during each quarterly sampling event (3Q23, 4Q23, and 1Q24). The sampling and analytical methods were found to be acceptable.



Visit [on.IN.gov/survey](https://on.IN.gov/survey) or scan the QR code to provide feedback.

*We appreciate your input!*



2. Recent groundwater sampling events revealed tetrachloroethylene (PCE) concentrations exceeding the R2 Groundwater Published Level (GWPL) in monitoring wells MW-2, MW-3R, and MW-12. Despite these exceedances, IDEM acknowledges that overall PCE concentrations have shown a decreasing trend since the last remediation efforts in August 2022. The most down-gradient well (MW-10) previously contained PCE above the GWPL and is now below the GWPL indicating a decrease in plume extents. IDEM finds the groundwater sampling acceptable.
3. Lines of evidence (LOEs) for Site closure have been provided in the Closure Request. Furthermore, SES requested Site closure using an Environmental Restrictive Covenant (ERC) and Environmental Restrictive Ordinance (ERO). The existing on-Site ERC which restricts residential use, groundwater use, and has vapor intrusion contingencies (VFC #82751798), is acceptable for the on-Site exposure risks. In addition, SES proposes to rely on the City of Richmond Unified Development Ordinance (Richmond Ordinance) to mitigate off-Site exposure risks (VFC #83472542, beginning on page 448). This ordinance is not legally sufficient and can only be used as a LOE to support Site closure when plume stability has been demonstrated and SES has provided an acceptable response to the ERO Request for Information (see Attachment A).
4. Exterior soil gas (SGe) sampling is highly recommended at the West End Bank Administrative Office (34 South 7th Street), Richmond Power and Light (44 South Eight Street), and the Salvation Army (707 South A Street) buildings to conclusively determine if vapor intrusion (VI) sampling is necessary. While previous assessments indicate a low probability of VI risks at these locations, conducting SGe sampling will provide additional data to confirm these findings and ensure a comprehensive evaluation. Without this data at closure, these three properties will each need to have an ERC that contains a VI contingency or a residential use restriction due to their proximity (within 100 feet) to monitoring well MW-2, which has contained PCE and TCE contamination since 2019. Furthermore, the SGe samples must be conducted from within five feet of the building foundation at these three properties to rule in/out paired VI sampling.

## Conclusions

Groundwater sampling from 3Q23 to 1Q24 indicates a decreasing trend in PCE concentrations, although three wells exceeded the R2 Groundwater Published Level. The on-site ERC appears adequate for managing on-site risks, while the Richmond Ordinance may be considered as a supporting line of evidence once plume stability is demonstrated and ERO information is provided. Soil gas sampling is highly recommended at the West End Bank Administrative Office, Richmond Power and Light, and the Salvation Army buildings to determine the necessity of vapor intrusion sampling. Without this data, implementing ERCs with VI contingencies or residential use restrictions will be required. \

IDEM must be provided a minimum of two weeks advance notice for field activities. Please submit a response to comments regarding how requested SGe sampling and the Richmond Ordinance will be addressed to IDEM within 60 days of the date of this letter.

To reduce paper usage, reports are required to be submitted via **State Cleanup's e-Submission Portal (ESP)**. Paper copies are no longer required or accepted; however, paper copies of figures and tables may be requested by the Project Manager.

To request access to the ESP, complete State Agency Form 57103, available on IDEM's website at [idem.in.gov/myesubmission](http://idem.in.gov/myesubmission). Please note that the size limit for an electronic document remains at 75 megabytes (MB) per IDEM Office of Land Quality electronic document submittal guidelines, which are available online at: [www.in.gov/idem/landquality/2368.htm](http://www.in.gov/idem/landquality/2368.htm).

If you have any questions or comments concerning this matter, please contact me by phone at 317-233-0131 or by email at [hhuntley@idem.in.gov](mailto:hhuntley@idem.in.gov), or you may call IDEM's toll free number at (800) 451-6027 and ask for Hayley Huntley.

Sincerely,



Hayley Huntley  
State Cleanup Section  
Office of Land Quality

cc: IDEM Site #200912040

Julie Lang, Esq., IDEM Office of Legal Counsel, email: [jlang@idem.in.gov](mailto:jlang@idem.in.gov)

Cory Smith, Specialty Earth Sciences, LLC, email: [csmith@sesciences.com](mailto:csmith@sesciences.com)

Wayne County Health Department, email: [cstinson@co.wayne.in.us](mailto:cstinson@co.wayne.in.us)

If a technical dispute arises and cannot be resolved in a timely manner, please see IDEM's website for information about appealing technical decisions through the Office of Land Quality's Technical Review Panel pilot program at: [www.in.gov/idem/cleanups/2370.htm](http://www.in.gov/idem/cleanups/2370.htm).



**Attachment A:**

**ERO REQUEST FOR INFORMATION**

*Please provide the following information pertaining to the site in which an Environmental Restrictive Ordinance (ERO) or similar is being proposed as a means to prevent exposure to contaminated groundwater. Please answer all components of each question and identify any persons and/or documents relied upon in producing your answers.*

**1. Site Information:**

- a. Provide the Site Name, IDEM Program overseeing remediation at the site, IDEM Site Number (and FID if applicable), Site Address including City and County.
- b. Provide a list of contaminants exceeding unconditional groundwater published levels.
- c. Provide a map of the Site depicting the interpreted extents of the contaminated groundwater plume, using isopleth lines where contamination exceeds IDEM's unconditional published levels.
- d. Provide a list of property addresses and parcel numbers where contaminated groundwater is located and therefore where this ordinance will be used as a method to prevent an unacceptable risk of exposure to the contaminated groundwater.

**2. Ordinance Information:**

- a. Provide the name of the ordinance, date the ordinance was passed, ordinance number, the IDEM VFC# and any other web address where a copy of the ordinance can be found.
- b. Provide a map depicting the ERO coverage area.

**3. Stakeholder Information:**

- a. Provide a point of contact (name, title, organization, and contact information) within the ERO governing body so that IDEM can make the written notice described in Indiana Code (IC) 36-1-6-11 (e). This point of contact should be, as appropriate, the President of the Board of County Commissioners, the President of the City-County Council, President of the Common Council or Town Council, President of the Township Board, President of the governing body, or chief executive officer of any other political subdivision that does not have a governing body.
- b. Provide contact information for any other relevant stakeholders. This may include the water utility, county health department, economic development organization, permit authorities, or any other public entity that may need to be made aware of the reliance on the ordinance.

**4. Planned Groundwater Resource Use:**

- a. Provide information about any future planned resource use of groundwater as a municipal water supply or other potable use supply, in or adjacent to the local area covered by the ordinance.

**5. Knowledge of Existing Wells:**

- a. Does the ordinance explicitly address wells that may have existed before the ordinance was passed?
- b. Provide information regarding the number, location, and type (potable, industrial, etc.) of existing wells within a one-mile radius of the contaminated groundwater plume. Note that the Indiana Department of Natural Resources water well database may not be a complete record of existing wells. Please identify additional resources utilized in obtaining this information.
- c. Identify whether the contaminated groundwater plume is within or near a Wellhead Protection Area.

**6. Exemptions or Variances Granted:**

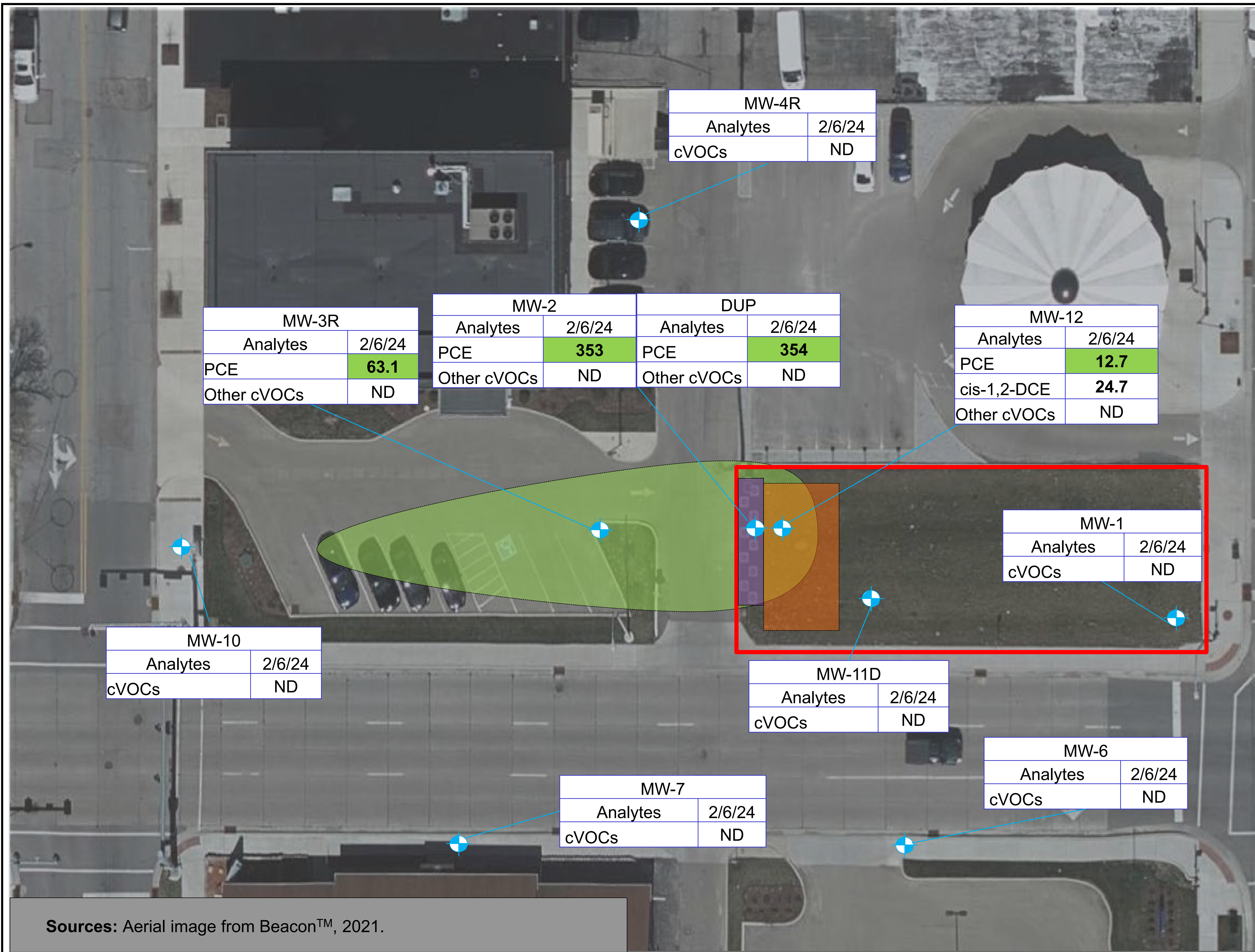
- a. Please provide information regarding any variances or special use exceptions that may have been granted allowing the installation of wells since the ordinance was enacted. In addition, please provide the criteria used by the governing body to evaluate applications for exception to or variance from the prohibition for well installation.

**7. Enforcement:**

- a. Describe the procedures and resources the governing body will use to enforce the ERO.







## **ATTACHMENT B**

*FIGURE 1, PCE PLUME MAP (FEBRUARY 2024)*



**LEGEND**



-  MONITORING WELL LOCATION
-  INJECTION WELL LOCATION
-  EXTENT OF FORMER EXCAVATION
-  FORMER ARMSTRONG CLEANERS' PROPERTY
-  MW-2 WELL DESIGNATION
-  ESTIMATED EXTENT OF PCE IN GROUNDWATER > 5 µg/L

MW-4R		MW-2		DUP		MW-12	
Analytes	2/6/24	Analytes	2/6/24	Analytes	2/6/24	Analytes	2/6/24
cVOCs	ND	PCE	<b>353</b>	PCE	<b>354</b>	PCE	<b>12.7</b>
		Other cVOCs	ND	Other cVOCs	ND	cis-1,2-DCE	<b>24.7</b>
						Other cVOCs	ND

MW-3R		MW-10	
Analytes	2/6/24	Analytes	2/6/24
PCE	<b>63.1</b>	cVOCs	ND
Other cVOCs	ND		

MW-1	
Analytes	2/6/24
cVOCs	ND

MW-11D	
Analytes	2/6/24
cVOCs	ND

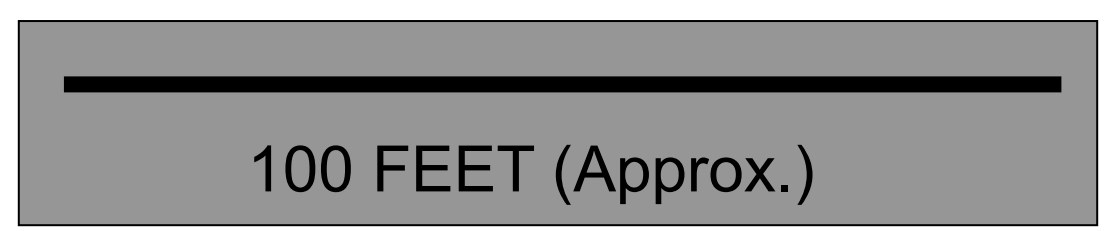
  

MW-6	
Analytes	2/6/24
cVOCs	ND

Analytes	LTRES
PCE	<b>5.0</b>
TCE	<b>5.0</b>
cis-1,2-DCE	<b>70</b>
Other cVOCs	ND

- Notes:**
- 1. Bold** analytical results are above laboratory reporting limits
  - 2. Bold and Green-shaded** analytical results exceed the 2023 IDEM OLQ Groundwater Long Term Residential Human Health Levels (LTRES)
  3. Results in micrograms per liter (µg/L), or parts per billion (ppb)
  4. ND = Below laboratory reporting limits (Not Detected)
  5. NE = Screening Level Not Established
  6. NS = Not Sampled due to insufficient water volume
  7. PCE = Tetrachloroethylene
  8. cis-1,2-DCE = cis-1,2-Dichloroethylene
  9. cVOCs = Chlorinated Volatile Organic Compounds

Sources: Aerial image from Beacon™, 2021.



SPECIALTY EARTH SCIENCES, LLC  
1050 Summit Drive, Carmel, IN 46032

Former Armstrong Cleaners, 48 S. 8<sup>th</sup> Street, Richmond, Indiana

IDEM State Cleanup ID# 200912040

**PCE Plume Map (February 2024)**

DATE: March 11, 2024  
SCALE: As Shown  
PROJ NO.: 10475-18-331

FIGURE **1**

## **ATTACHMENT C**

### *RICHMOND OFFICIAL ZONING MAP*





















Legend

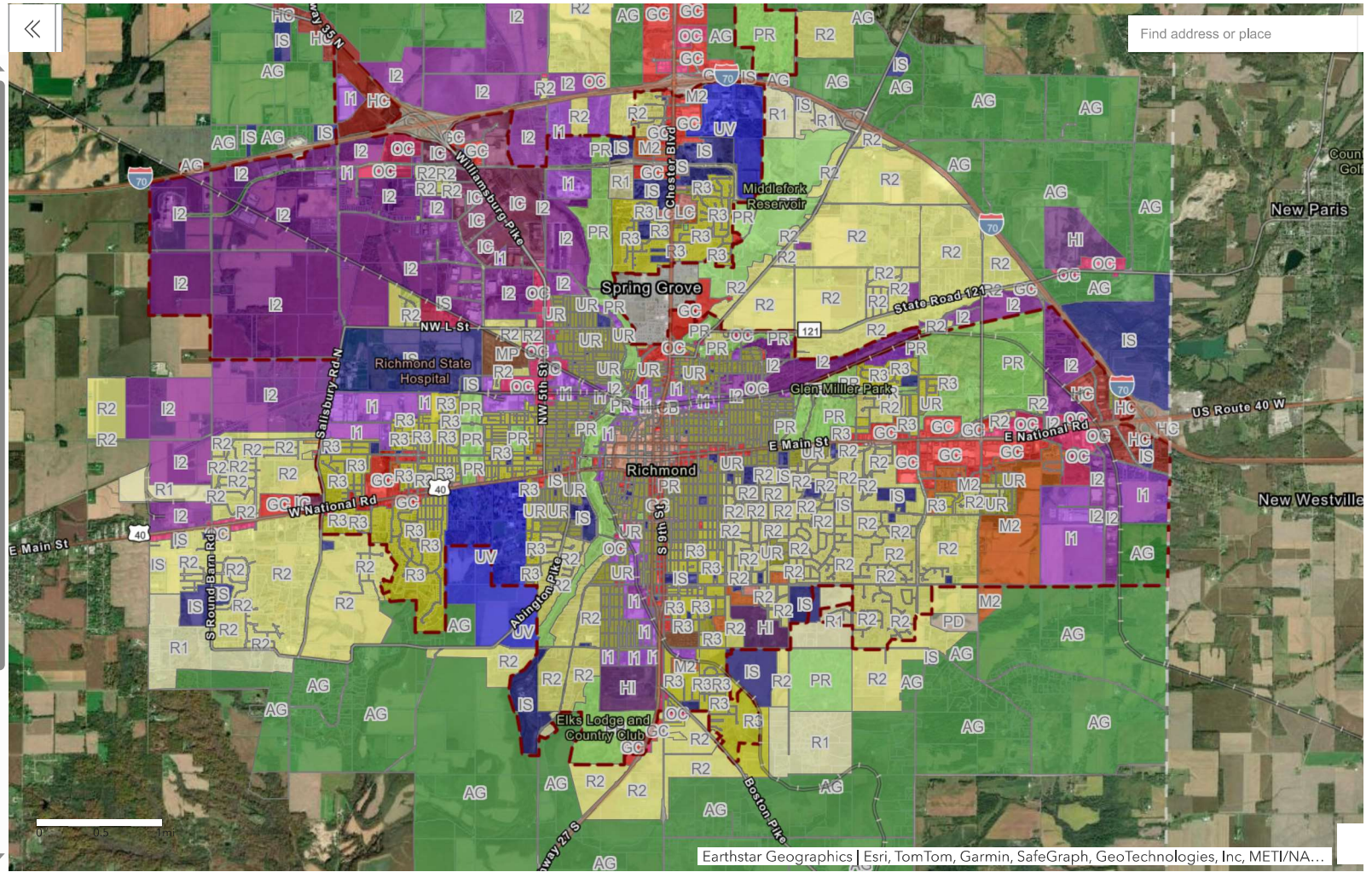
Details

Incorporated Areas



Richmond Zoning

-  AG -Agricultural
-  CB - Central Business
-  GC - General Commercial
-  HC - Highway Commercial
-  HI - High Impact
-  I1 - Low to Moderate Intensity Industrial
-  I2 - High Intensity Industrial
-  IC - Industrial Commercial
-  IS - Institutional
-  LC - Limited Commercial
-  M1 - Multiple-family Residential
-  M2 - Intense Multiple-family Residential
-  MP - Manufactured Home Park
-  NC - Neighborhood Commercial
-  OC - Outdoor Commercial
-  PR - Parks and Recreation
-  R1 - Low Density Single-family Residential
-  R2 - Medium Density Single-family Residential



**ATTACHMENT D**

*RICHMOND AQUIFER PROTECTION OVERLAY DISTRICT DOCUMENTATION*



# Aquifer Protection Overlay (APO) District

## 3.07 APO District Intent, Effect on Uses, and Effect on Standards

District Intent	Effect on Land Uses	Effect on Development Standards
<p><b>The Aquifer Protection Overlay (APO)</b> The intent of this District is to guide development and existing uses in those areas where an aquifer has been identified as deserving of detailed standards because of the existence of a wellfield providing potable water to the local water utility. This District also stems from Section 1428 of the 1986 Amendment to the Federal Safe Drinking Water Act that mandates that every State develop a Wellhead Protection Program to protect public water supplies which utilize a groundwater source.</p> <p><b>Land Use Restrictions</b></p> <ul style="list-style-type: none"> <li>• Uses that utilize or contain volatile, poisonous, toxic, or other material hazardous to the potability of water are restricted or prohibited</li> </ul> <p><b>Development Standard Restrictions</b></p> <ul style="list-style-type: none"> <li>• Prevent the contamination of groundwater resources</li> <li>• Prevent excessive extraction of the groundwater resources</li> <li>• Regulate land-use activities that store, handle, or produce hazardous material</li> <li>• Require the use of best management practices (regulatory and non-regulatory) for the protection of existing and future groundwater sources of drinking water</li> <li>• Identify the responsibility of the City of Richmond, as the local governmental unit, and the Department of Metropolitan Development, as the responsible agent for the City, in protecting groundwater resources in the City of Richmond</li> <li>• Prevent any increase in the risk of contamination of the aquifer from existing or future uses</li> </ul> <p><b>Application of District</b></p> <ul style="list-style-type: none"> <li>• Two Zoning Districts, designated as the East Aquifer Protection District and the West Aquifer Protection District are designated on the Official Zoning Map.</li> </ul>	<p>All permitted uses in the base zoning district are permitted in the APO District except as prohibited in <a href="#">Section 3.10(G)</a>. All special exception uses permitted in the base zoning district are allowed as such in the APO District except as prohibited in <a href="#">Section 3.10(G)</a>.</p>	<p>The development standards from the base zoning district shall apply to the APO District in addition to the development standards described in <a href="#">Section 3.09</a>.</p>

# Aquifer Protection Overlay (APO) District

## 3.08 APO District Applicability

The following requirements apply to all land within the APO District as defined in *Section 3.09: APO District Boundary*. Under no circumstances shall a planned development or rezoning of property change the applicability of the APO District's land use restrictions and additional development standards.

## 3.09 APO District Jurisdictional Boundary

Two Aquifer Protection areas are hereby established the Aquifer Protection Overlay (APO) District; An East Aquifer Protection District, and a West Aquifer Protection District and shall be noted independently on the Official Zoning Map.

## 3.10 APO District Development Standards

- A. **Exemptions:** Notwithstanding any prohibition or other requirements under this Ordinance, special exemptions and limited exclusions are authorized for:
1. Transportation of any regulated substances through the Aquifer Protection Districts, provided the transporting vehicle is in continuous transit;
  2. Storage of fuel and lubricants for on-site vehicle and/or machinery operations, either in above ground storage facilities or in underground storage tanks that meet U.S. EPA standards as set forth in IDEM requirements and regulations (329 IAC 9-1-1);
  3. The use, storage, handling and/or production of regulated substances associated with non-routine maintenance or repair of property or equipment, shall be limited to normal business use, as identified in the information supplied for the Certificate of Conformance;
  4. Regulated substances provided they are packaged for personal or household use or are present in the same form and concentration as a product packaged for use by the general public. In no case shall regulated substances claimed under this exclusion include hydrocarbons or halogenated hydrocarbon solvents. The inventory of such regulated substances shall be limited to normal business use, as identified in the information supplied for the Certificate of Conformance;
  5. Office supplies that are used for the operation of on-site administrative offices, provided such supplies are prepackaged in a form ready for use;
  6. Sales or distribution establishments that store and handle regulated substances for resale in their original containers;
  7. Geotechnical borings; and
  8. Facilities used in the transmission and distribution of electricity by an electric utility authorized to provide service in the Aquifer Protection District.
- B. **Water Recharge:** Any storm water structure within the East Aquifer Protection District shall be designed to provide for a maximum rate of recharge into the groundwater system. Any recharge system shall be constructed to the satisfaction of the Engineer of the City of Richmond, Indiana preferably using low impact development techniques that serve to both detoxify pollution and provide for infiltration to recharge the aquifer. Acceptable examples include, but are not limited to, permeable pavements, bio-retention areas, constructed wetlands and grassy swales. The use of dry wells, French drains and gravel-lined ditches that do not provide for detoxification is prohibited. Site plans exceeding five acres must:
1. Include an approval by a licensed professional qualified in the field of groundwater hydrology; and
  2. Be acceptable to the City Engineer.
- C. **Sanitary Sewers:** Except where service is not currently available, all sewage disposal within the Districts must be through sanitary sewers and the publicly owned treatment works or holding tanks. Infiltration and leach field systems are prohibited. Sanitary sewer lines shall be inspected by the Richmond Sanitary District for exfiltration and/or infiltration at least once every five (5) years.
- D. **Paved Surfaces:** The use of salt and other substances for ice control shall be minimized consistent with public highway safety requirements.

# Aquifer Protection Overlay (APO) District

- E. **Outside Storage:** Hazardous substances as defined in *Section 3.10(G)* and regulated substances in storage containers totaling fifty-five (55) gallons or greater in whole or in part which have the potential to contaminate the aquifer and could leach or diffuse by rain or wind into the sub-surface soils either directly or indirectly shall be permitted to be stored outside only in areas with secondary containment and/or diversionary structures designed so that said leaching or diffusion of said materials or substances does not occur and an accidental spill is contained on an impermeable surface for total recapture.
- F. **Special Restrictions within the Districts:**
1. No facility shall be permitted to construct or cause to be constructed, any underground storage tanks, except as set out in *Section 3.10(A)(2)*.
  2. Fertilizers, pesticides (including, but not limited to: herbicides, insecticides, fungicides, rodenticides), or other leachable materials shall not be used in amounts which result in groundwater contamination and shall be used and disposed of in accordance with the state Pesticide Review Board and all federal label instructions;
  3. Disposal of liquid or leachable wastes on or in the land is prohibited;
  4. Extractive operations, except for potable quality water, are prohibited, except for construction, which may replace topsoil and re-vegetate as quickly as possible.
- G. **Special Restrictions within the Districts:** Except as allowed in *Section 3.10*, the following uses remain prohibited in the Aquifer Protection Districts, even if they shall be allowed by right in the underlying zoning district:
1. **Regulated Substances:** The manufacturing, compounding, processing, packaging and/or assembling and storage of any federally regulated pesticides (including, but not limited to: herbicides, insecticides, fungicides, rodenticides and disinfectants), acids, radioactive materials, coke or gas, metal electroplating exclusively, chemical packaging facilities, composting, sanitary and/or demolition landfills, battery and/or tire storage and collection facilities, paper pulp, or the tanning of hides or the rendering of animals;
  2. **Land Application:** Land application of waste water, surface impoundments for waste treatment or storage, waste burning areas, pipelines except natural gas and water, and all classes of injection wells except geothermal heat pumps utilizing a “closed loop” system;
  3. **Hazardous Material Storage:** The manufacturing, compounding, processing, packaging and/or assembling and storage of hazardous materials, excluding manufacturing, compounding, processing, packaging and/or assembling and storage for on-site usage. These hazardous materials, as periodically updated, include:
    - a. Any hazardous substance, toxic, chemical or hazardous waste as listed in the following federal regulations:
      - i. Superfund Amendments and Reauthorization Act (SARA) of 1986, Section 302 Extremely Hazardous Substances List (40 Code of Federal Regulations (C.F.R.) 300, App. A and B);
      - ii. Comprehensive Environmental Response Compensation and Liability Act Superfund (CERCLA) of 1980, Hazardous Substances List (40 C.F.R. 302, Table 302.4);
      - iii. SARA of 1986, Section 313, Toxic Chemicals List (40 C.F.R. Section 372.45); and
      - iv. Resource Conservation and Recovery Act (RCRA) of 1976 and 1984 Amendments, Hazardous Wastes List (P and U Categories) (40 C.F.R. Section 261.33 (e) and (f)).
    - b. Note: The lists referenced in *Section 3.10(G)(3)(a)(i to iv)*, are summarized on the Title III List of Lists – Chemicals Subject to Reporting Under Title III of the Superfund Amendments and Reauthorization Action (SARA) of 1986, published July 1987, U.S. EPA. (See [www.epa.gov/ceppo/pubs/title3.pdf](http://www.epa.gov/ceppo/pubs/title3.pdf)).
    - c. If it can be demonstrated that the chemical characteristics of a specific hazardous material set forth in *Section 3.10(G)* above (such as, but not limited to, gases and insoluble solids) pose no risk to the aquifer, an exemption may be granted by the Department of Metropolitan Development in consultation with the Wayne County Emergency Management Agency.
  4. **Manufacturing of Regulated Substances:** The manufacturing, compounding, processing, packaging and/or assembling and storage of regulated substances not included in *Section 3.10(G)(3)* above must be in accordance with Best Management Practices.

# Aquifer Protection Overlay (APO) District

- H. **Best Management Practices Plan:** Businesses, facilities or activities that use or store regulated substances in excess of five (5) gallons of a liquid, or twenty-five (25) pounds of a solid, shall develop and maintain a Best Management Practices Plan that includes:
1. A list of Regulated Substances
  2. Secondary containment for storage and use area
  3. Disposal procedures
  4. Emergency spill procedures and notification
  5. Appropriate training for workers
  6. The management plan, which may include forms or information prepared for other governmental agencies, shall be placed on file with the Department of Metropolitan Development and the Wayne County Emergency Management Agency, and shall be updated in a timely manner whenever a change affecting the management plan occurs.

## 3.11 Process Supplement

- A. **Requirement for Conformance Certificate:** Prior to Preliminary Plan Approval by the Department of Metropolitan Development, the applicant shall provide a "Certificate of Conformance" with the Aquifer Protection District Ordinance, issued by the City Engineer of the City of Richmond, in a timely manner, for all proposed land-use activities in the East and West Districts within the City of Richmond. A building permit in conformity with this Ordinance shall be required prior to the commencement of any development activity.

## 3.12 Monitoring

- A. **Inspections:** Inspections, during normal business hours, may be required to verify compliance with the Aquifer Protection Ordinance. Such inspections shall be performed by the City of Richmond or its designee.
- B. **Reporting of Discharges:** The discharge of greater than ten (10) pounds or one (1) gallon of any regulated substance shall be reported immediately by the facility owner, operator, or responsible party by calling 911. Discharges of hazardous materials shall comply with Federal EPA reporting requirements.

## 3.13 Administration

- A. **Review and Administration:** The Department of Metropolitan Development shall be responsible for the review of all development plans within the Aquifer Protection Districts, and other related matters that may arise in the administration of this Ordinance.
- B. **Reporting Requirements:** It shall be the responsibility of the City of Richmond Department of Metropolitan Development to provide the Wellhead Protection Local Planning Team with copies of Conformance Certificates, Regulated Substances registration information and Facilities Inspection Reports.

## **ATTACHMENT E**

*IDNR WATER WELL VIEWER MAP*



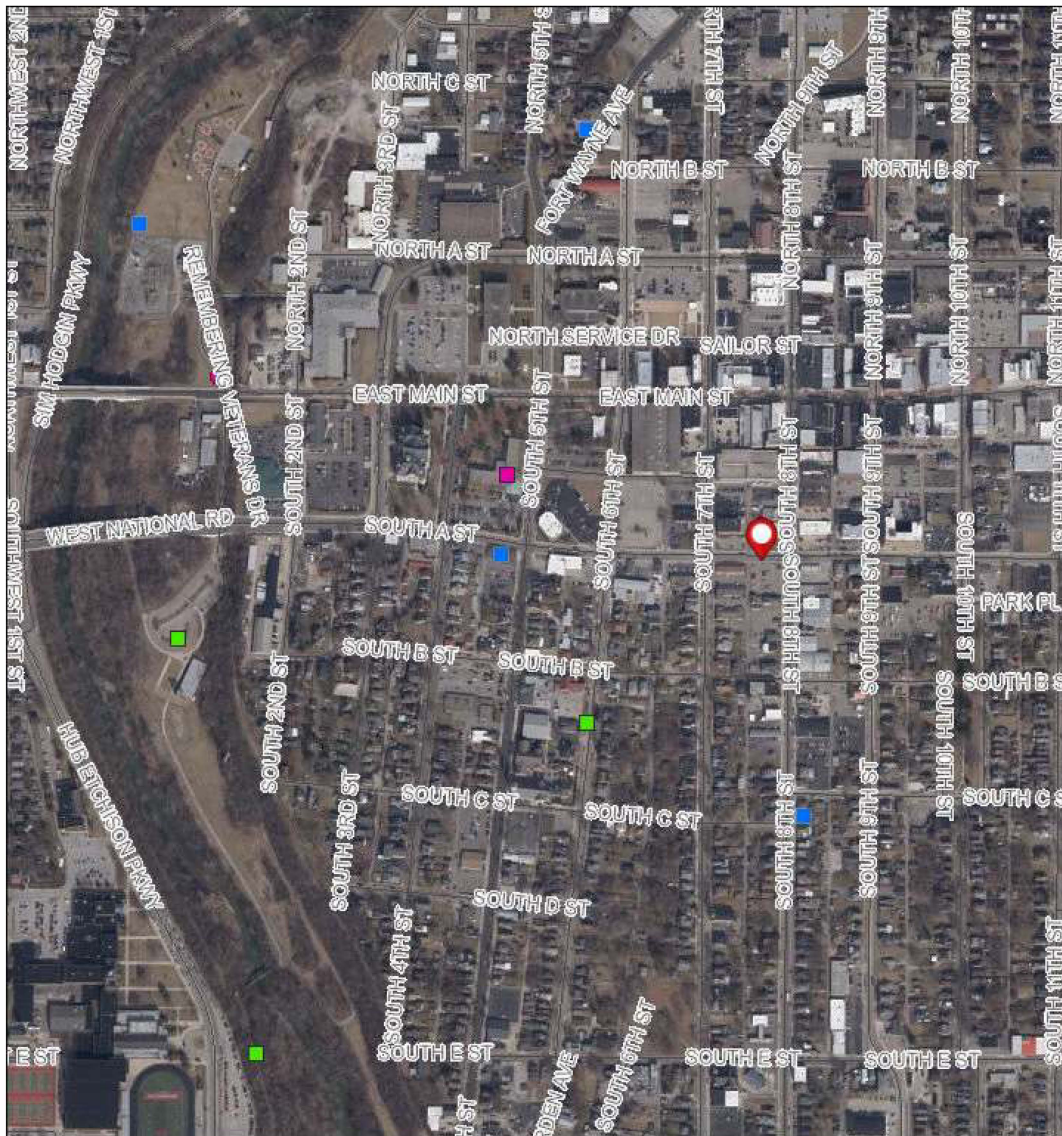


# IDNR 1 Mile Radius Well Record Report

## Area of Interest (AOI) Information

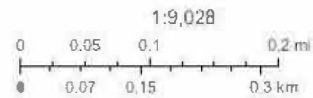
Area : 87,513,003.52 ft<sup>2</sup>

Jun 24 2024 13:32:36 Eastern Daylight Time



Unspecified Well Type Boreholes Drilled to Bedrock

- Unlocated
- Field Located
- Unlocated
- Unlocated
- Unlocated
- County Roads



Indiana Geographic Information Office (IGIO)

## Summary

Name	Count	Area(ft <sup>2</sup> )	Length(ft)
Unspecified Well Type	12	N/A	N/A
Unconsolidated Wells	18	N/A	N/A
Boreholes Drilled to Bedrock	5	N/A	N/A

## Unspecified Well Type

#	REFERENCE NUMBER	AQUIFER ELEVATION	BAIL ERRT	BEDROCK ELEVATION	PUMP RATE
1	232,893.00	0.00	0.00	0.00	0.00
2	321,433.00	0.00	0.00	0.00	0.00
3	321,434.00	0.00	0.00	0.00	0.00
4	321,436.00	0.00	0.00	0.00	0.00
5	321,459.00	0.00	0.00	0.00	0.00
6	297,901.00	0.00	0.00	0.00	20.00
7	317,297.00	0.00	0.00	0.00	0.00
8	232,923.00	0.00	0.00	0.00	1,000.00
9	232,933.00	0.00	0.00	0.00	850.00
10	163,550.00	0.00	0.00	0.00	10.00
11	232,642.00	0.00	0.00	0.00	3.00
12	317,295.00	0.00	0.00	0.00	0.00

#	DEPTH TO BEDROCK	SCREEN LEVEL	STATIC	DEPTH	OWNER
1	0.00	0.00	23.00	63.00	DR. J.A. THOMSON
2	0.00	0.00	0.00	0.00	INDIANA AMERICAN WATER CO.
3	0.00	0.00	0.00	0.00	INDIANA AMERICAN WATER CO.
4	0.00	0.00	0.00	0.00	INDIANA AMERICAN WATER CO.
5	0.00	0.00	0.00	61.00	INDIANA AMERICAN WATER CO.
6	0.00	0.00	46.00	49.00	ROGER SMITH
7	0.00	0.00	0.00	0.00	INDIANA AMERICAN WATER CO.
8	0.00	0.00	13.00	55.00	BRUNSWICK RECORDING CO.
9	0.00	0.00	0.00	59.00	BRUNSWICK RECORDING CO.
10	0.00	0.00	45.00	80.00	LELAND E. HANKINS
11	0.00	0.00	60.00	86.00	CHARLES PYLE
12	0.00	0.00	0.00	0.00	INDIANA AMERICAN WATER CO.



#	OWNER ADDRESS	RANGE	TOWNSHIP	SECTION	UTM Y
1	<i>No Data</i>	1W	13N	4	0.00
2	RICHMOND, IN	1W	13N	5	0.00
3	RICHMOND, IN	1W	13N	5	0.00
4	RICHMOND, IN	1W	13N	5	0.00
5	RICHMOND, IN	1W	13N	5	0.00
6	301 S 19TH ST., RICHMOND, IN	1W	14N	22	0.00
7	RICHMOND, IN	1W	13N	5	0.00
8	S 1ST ST., RICHMOND	1W	13N	5	0.00
9	S 1ST ST., RICHMOND	1W	13N	5	0.00
10	46 S. 19TH ST., RICHMOND, IN.	14E	17N	22	0.00
11	516 N.W. 4TH. ST. RICHMOND,IN.	1W	14N	16	0.00
12	RICHMOND, IN	1W	14N	32	0.00

#	UTM X	RESERVE NUMBER	RESERVE NAME	COUNTY	TOPO
1	0.00	0	<i>No Data</i>	WAYNE	RICHMOND
2	0.00	0	<i>No Data</i>	WAYNE	RICHMOND
3	0.00	0	<i>No Data</i>	WAYNE	RICHMOND
4	0.00	0	<i>No Data</i>	WAYNE	RICHMOND
5	0.00	0	<i>No Data</i>	WAYNE	RICHMOND
6	0.00	0	<i>No Data</i>	WAYNE	NEW PARIS, OH-IN
7	0.00	0	<i>No Data</i>	WAYNE	RICHMOND
8	0.00	0	<i>No Data</i>	WAYNE	RICHMOND
9	0.00	0	<i>No Data</i>	WAYNE	RICHMOND
10	0.00	0	<i>No Data</i>	WAYNE	FOUNTAIN CITY
11	0.00	0	<i>No Data</i>	WAYNE	FOUNTAIN CITY
12	0.00	0	<i>No Data</i>	WAYNE	RICHMOND

#	BAILER DR	BAILER HR	CASING D	CASING L	CASING M
1	0.00	0.00	0.00	63.00	<i>No Data</i>
2	0.00	0.00	6.63	60.00	<i>No Data</i>
3	0.00	0.00	6.63	47.00	<i>No Data</i>
4	0.00	0.00	6.63	34.00	<i>No Data</i>
5	0.00	0.00	6.63	60.00	<i>No Data</i>
6	0.00	0.00	36.00	49.00	CONCRETE PVC
7	0.00	0.00	6.60	50.00	<i>No Data</i>
8	0.00	0.00	12.00	40.00	<i>No Data</i>
9	0.00	0.00	12.00	0.00	<i>No Data</i>
10	0.00	0.00	0.00	0.00	<i>No Data</i>
11	0.00	0.00	4.00	86.00	<i>No Data</i>
12	0.00	0.00	6.60	29.00	<i>No Data</i>

#	GROUT T	GROUT M	LINER DIA	LINER TOT	PUMP SET
1	0.00	No Data	0.00	0.00	0.00
2	0.00	No Data	0.00	0.00	0.00
3	0.00	No Data	0.00	0.00	0.00
4	0.00	No Data	0.00	0.00	0.00
5	0.00	No Data	0.00	0.00	0.00
6	6.00	BENT	0.00	0.00	48.00
7	0.00	No Data	0.00	0.00	0.00
8	0.00	No Data	0.00	0.00	0.00
9	0.00	No Data	0.00	0.00	0.00
10	0.00	No Data	4.00	82.00	0.00
11	0.00	No Data	0.00	0.00	0.00
12	0.00	No Data	0.00	0.00	0.00

#	PUMP DW	PUMP HOUR	SCREEN D	DTM COMP DATE	GRND ELEV
1	0.00	0.00	0.00	9/23/1932, 6:00 PM	0.00
2	0.00	0.00	0.00	No Data	0.00
3	0.00	0.00	0.00	No Data	0.00
4	0.00	0.00	0.00	10/4/1998, 7:00 PM	0.00
5	0.00	0.00	0.00	9/22/1998, 7:00 PM	0.00
6	46.00	5.00	0.00	9/2/1997, 7:00 PM	0.00
7	0.00	0.00	0.00	No Data	0.00
8	0.00	0.00	0.00	7/23/1952, 7:00 PM	0.00
9	0.00	0.00	0.00	12/31/1945, 6:00 PM	0.00
10	0.00	3.00	0.00	9/28/1967, 7:00 PM	0.00
11	24.00	21.00	0.00	6/19/1962, 7:00 PM	0.00
12	0.00	0.00	0.00	No Data	0.00

#	PUMP TYPE DESC	OWNER TX	UTM X NAD83	UTM Y NAD83	LOCATION TYPE	REPORT	Count
1	No Data	No Data	681,406.00	4,410,114.00	Estimated Location/TRS_quarter sections_county	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwell/?refNo=232893&amp;from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwell/?refNo=232893&amp;from=SUMMARY&amp;_action=Details</a>	1
2	No Data	No Data	679,783.00	4,410,081.00	Estimated Location/TRS_quarter sections_county	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwell/?refNo=321433&amp;from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwell/?refNo=321433&amp;from=SUMMARY&amp;_action=Details</a>	1
3	No Data	No Data	679,783.00	4,410,081.00	Estimated Location/TRS_quarter sections_county	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwell/?refNo=321434&amp;from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwell/?refNo=321434&amp;from=SUMMARY&amp;_action=Details</a>	1
4	No Data	No Data	679,783.00	4,410,081.00	Estimated Location/TRS_quarter sections_county	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwell/?refNo=321436&amp;from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwell/?refNo=321436&amp;from=SUMMARY&amp;_action=Details</a>	1
5	No Data	No Data	679,783.00	4,410,081.00	Estimated Location/TRS_quarter sections_county	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwell/?refNo=321459&amp;from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwell/?refNo=321459&amp;from=SUMMARY&amp;_action=Details</a>	1
6	No Data	(765)973-3485	681,744.00	4,410,435.00	Office Located/Geocoded	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwell/?refNo=297901&amp;from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwell/?refNo=297901&amp;from=SUMMARY&amp;_action=Details</a>	1
7	No Data	No Data	680,184.00	4,410,500.00	Estimated Location/TRS_quarter sections_county	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwell/?refNo=317297&amp;from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwell/?refNo=317297&amp;from=SUMMARY&amp;_action=Details</a>	1
8	No Data	No Data	679,673.00	4,410,593.00	Estimated Location/TRS_quarter sections_county	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwell/?refNo=232923&amp;from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwell/?refNo=232923&amp;from=SUMMARY&amp;_action=Details</a>	1
9	No Data	No Data	679,673.00	4,410,593.00	Estimated Location/TRS_quarter sections_county	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwell/?refNo=232933&amp;from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwell/?refNo=232933&amp;from=SUMMARY&amp;_action=Details</a>	1

10	No Data	No Data	681,682.00	4,410,853.00	Office Located/Geocoded	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwell?refNo=163550&amp;from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwell?refNo=163550&amp;from=SUMMARY&amp;_action=Details</a>	1
11	No Data	No Data	679,149.00	4,411,545.00	Office Located/Geocoded	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwell?refNo=232642&amp;from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwell?refNo=232642&amp;from=SUMMARY&amp;_action=Details</a>	1
12	No Data	No Data	679,810.00	4,411,725.00	Estimated Location/TRS_quarter sections_county	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwell?refNo=317295&amp;from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwell?refNo=317295&amp;from=SUMMARY&amp;_action=Details</a>	1

### Unconsolidated Wells

#	AQUIFER ELEVATION	BAIL ERRT	BAILER DR	BAILER HR	BEDROCK ELEVATION
1	0.00	0.00	0.00	0.00	0.00
2	820.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00
8	1,032.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00
11	1,020.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00
13	848.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00

#	CASING D	CASING L	CASING M	COUNTY	DEPTH
1	5.00	126.60	PVC	WAYNE	128.00
2	26.00	29.00	<i>No Data</i>	WAYNE	59.00
3	6.63	58.00	<i>No Data</i>	WAYNE	0.00
4	5.00	67.00	PVC	WAYNE	71.00
5	5.00	84.00	PVC	WAYNE	87.00
6	5.00	126.00	PVC	WAYNE	128.00
7	6.00	88.00	PVC	WAYNE	93.00
8	30.00	0.00	<i>No Data</i>	WAYNE	28.00
9	5.00	144.00	PVC	WAYNE	147.00
10	5.00	137.00	PVC	WAYNE	140.00
11	36.00	0.00	<i>No Data</i>	WAYNE	30.00
12	5.50	48.00	PVC	WAYNE	53.00
13	6.00	47.00	<i>No Data</i>	WAYNE	0.00
14	5.00	99.00	PVC	WAYNE	101.00
15	5.00	73.00	PVC	WAYNE	76.00
16	4.50	71.50	<i>No Data</i>	WAYNE	73.50
17	10.00	59.58	STEEL	WAYNE	66.42
18	6.00	53.00	PVC	WAYNE	68.00

#	DEPTH TO BEDROCK	DTM COMP DATE	GRND ELEV	GROUT M	GROUT T
1	0.00	July 25, 2005	0.00	BENSEAL & EZ MUD	115.00
2	0.00	March 25, 1954	880.00	<i>No Data</i>	0.00
3	0.00	<i>No Data</i>	0.00	<i>No Data</i>	0.00
4	0.00	May 3, 2001	0.00	BNSL & EZ MUD	45.00
5	0.00	June 12, 2000	0.00	BNSL & EZ MUD	84.00
6	0.00	November 13, 2002	0.00	BNSL & EZ MUD	120.00
7	0.00	May 14, 1998	0.00	BENTONITE	0.00
8	0.00	March 26, 1980	1,060.00	<i>No Data</i>	0.00
9	0.00	July 24, 2007	0.00	BENSEAL & E-Z MUD	136.00
10	0.00	November 10, 2003	0.00	BENSEAL & EZ MJD	130.00
11	0.00	April 13, 1977	1,050.00	<i>No Data</i>	0.00
12	0.00	August 1, 1990	0.00	ENVIROPLUG	15.00
13	0.00	November 8, 1983	900.00	<i>No Data</i>	0.00
14	0.00	June 8, 2000	0.00	BENSEAL & EZ MUD	99.00
15	0.00	October 9, 2001	0.00	BENSELA & EZ MUD	73.00
16	0.00	October 20, 1960	0.00	<i>No Data</i>	0.00
17	0.00	October 11, 1939	0.00	<i>No Data</i>	0.00
18	0.00	June 21, 2000	0.00	BENT	27.00

#	LINER DIA	LINER TOT	LOCATION TYPE	OWNER	OWNER ADDRESS
1	0.00	0.00	Office Located/Geocoded	DAVID HILL	1331 S G STREET RICHMOND, IN
2	0.00	0.00	Field Located	RICHMOND WATER WORKS CORP	RICHMOND
3	0.00	0.00	Estimated Location/TRS_quarter sections_county	INDIANA AMERICAN WATER CO.	RICHMOND, IN
4	0.00	0.00	Office Located/Geocoded	DARRELL SCHUERMAN	459 SW 3RD ST., RICHMOND, IN
5	0.00	0.00	Office Located/Geocoded	KURT HARTMAN	400 S. 14TH ST., RICHMOND, IN
6	0.00	0.00	Office Located/Geocoded	EDWARD & MICHELLE THORNTON	329 S. 15TH ST., RICHMOND, IN
7	0.00	0.00	Office Located/Geocoded	MATTHEW FLOCKHART	305 S 8TH ST RICHMOND, IN
8	0.00	0.00	Estimated Location/TRS_quarter sections_county	JANE ROBINSON	107 SW G ST RICHMOND IN
9	0.00	0.00	Office Located/Geocoded	PRIME PROPERTY REALTY	100 S 5TH ST RICHMOND, IN
10	0.00	0.00	Office Located/Geocoded	DAN & RHONDA NUFRIO	113 S 21ST ST RICHMOND IN
11	0.00	0.00	Estimated Location/TRS_quarter sections_county	ELAINE JAFEE	220 S 23RD RICHMOND, IN
12	0.00	0.00	Office Located/Geocoded	THOMAS RHOUBLE	24 1/2 S 13TH., RICHMOND, IN
13	0.00	0.00	Estimated Location/TRS_quarter sections_county	LUDWIG GREENHOUSE	28 WATER FALL, RICHMOND IN
14	0.00	0.00	Office Located/Geocoded	BRUCE LOCHOTSKI	100 FORT WAYNE AVE RICHMOND IN
15	0.00	0.00	Office Located/Geocoded	MIKE RICE	304 NW 3RD ST RICHMOND IN
16	0.00	0.00	Office Located/Geocoded	ALVIN G. BROOKSHEAR	319 N. 13TH. ST. RICHMOND, IN.
17	0.00	0.00	Estimated Location/TRS_quarter sections_county	THE PENNSYLVANIA RAILROAD CO.	<i>No Data</i>
18	0.00	0.00	Estimated Location/TRS_quarter sections_county	AGAPA FELLOWSHIP	1430 CHESTER BLVD., RICHMOND, IN

#	OWNER TX	PUMP DW	PUMP HOUR	PUMP RATE	PUMP SET
1	(765)939-8550	40.00	1.00	16.00	0.00
2	No Data	19.20	0.00	1,009.00	0.00
3	No Data	0.00	0.00	0.00	0.00
4	(765)966-4238	10.00	1.00	45.00	0.00
5	(765)862-0828	15.00	1.00	65.00	0.00
6	(765)966-2329	15.00	1.00	45.00	0.00
7	(000)965-7586	70.00	24.00	15.00	0.00
8	No Data	0.00	0.00	0.00	0.00
9	(765)914-7531	25.00	1.00	50.00	0.00
10	(765)965-9339	10.00	1.00	65.00	0.00
11	No Data	0.00	0.00	0.00	0.00
12	(317)962-9110	12.00	1.00	40.00	0.00
13	No Data	0.00	6.00	12.00	0.00
14	(765)962-0758	30.00	1.00	30.00	0.00
15	(765)962-9659	0.00	1.75	50.00	0.00
16	No Data	13.00	1.00	6.00	0.00
17	No Data	0.00	0.00	40.00	0.00
18	(765)966-6016	0.00	0.00	0.00	0.00



#	PUMP TYPE DESC	RANGE	REFERENCE NUMBER	REPORT	RESERVE NAME
1	No Data	12E	394409	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=394409&amp;_from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=394409&amp;_from=SUMMARY&amp;_action=Details</a>	No Data
2	No Data	1W	232963	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=232963&amp;_from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=232963&amp;_from=SUMMARY&amp;_action=Details</a>	No Data
3	No Data	1W	321435	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=321435&amp;_from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=321435&amp;_from=SUMMARY&amp;_action=Details</a>	No Data
4	No Data	1W	352202	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=352202&amp;_from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=352202&amp;_from=SUMMARY&amp;_action=Details</a>	No Data
5	No Data	1W	344315	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=344315&amp;_from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=344315&amp;_from=SUMMARY&amp;_action=Details</a>	No Data
6	No Data	13E	369829	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=369829&amp;_from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=369829&amp;_from=SUMMARY&amp;_action=Details</a>	No Data
7	No Data	12E	325259	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=325259&amp;_from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=325259&amp;_from=SUMMARY&amp;_action=Details</a>	No Data
8	No Data	1W	232898	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=232898&amp;_from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=232898&amp;_from=SUMMARY&amp;_action=Details</a>	No Data
9	No Data	14E	407138	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=407138&amp;_from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=407138&amp;_from=SUMMARY&amp;_action=Details</a>	No Data
10	No Data	1W	377757	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=377757&amp;_from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=377757&amp;_from=SUMMARY&amp;_action=Details</a>	No Data

11	No Data	1W	232903	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=232903&amp;_from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=232903&amp;_from=SUMMARY&amp;_action=Details</a>	No Data
12	No Data	13E	241900	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=241900&amp;_from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=241900&amp;_from=SUMMARY&amp;_action=Details</a>	No Data
13	No Data	1W	239074	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=239074&amp;_from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=239074&amp;_from=SUMMARY&amp;_action=Details</a>	No Data
14	No Data	13E	344273	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=344273&amp;_from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=344273&amp;_from=SUMMARY&amp;_action=Details</a>	No Data
15	No Data	1W	358190	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=358190&amp;_from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=358190&amp;_from=SUMMARY&amp;_action=Details</a>	No Data
16	No Data	1W	232736	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=232736&amp;_from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=232736&amp;_from=SUMMARY&amp;_action=Details</a>	No Data
17	No Data	1W	239079	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=239079&amp;_from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=239079&amp;_from=SUMMARY&amp;_action=Details</a>	No Data
18	No Data	1W	344304	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=344304&amp;_from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=344304&amp;_from=SUMMARY&amp;_action=Details</a>	No Data

#	RESERVE NUMBER	SCREEN D	SCREEN LEVEL	SECTION	STATIC
1	0	5.00	1.60	21	60.00
2	0	46.00	0.00	5	10.50
3	0	0.00	7.00	5	0.00
4	0	5.00	4.00	6	34.00
5	0	5.00	3.00	33	12.00
6	0	5.00	20.00	29	43.00
7	0	6.00	5.00	11	23.00
8	0	0.00	0.00	4	14.00
9	0	5.00	3.00	22	62.00
10	0	5.00	3.00	9	55.00
11	0	0.00	0.00	4	18.00
12	0	5.50	5.00	26	32.00
13	0	6.00	5.00	32	0.00
14	0	5.00	2.00	28	49.00
15	0	5.00	3.00	27	30.00
16	0	4.00	2.00	16	56.00
17	0	8.00	6.83	32	19.00
18	0	6.00	16.00	33	0.00

#	TOPO	TOWNSHIP	UTM X	UTM X NAD83	UTM Y	UTM Y NAD83	Count
1	HAGERSTOWN	18N	0.00	681,136.00	0.00	4,409,836.00	1
2	RICHMOND	13N	679,908.00	679,906.00	4,409,678.00	4,409,893.00	1
3	RICHMOND	13N	0.00	679,783.00	0.00	4,410,081.00	1
4	LIBERTY	12N	0.00	679,281.00	0.00	4,410,105.00	1
5	WHITEWATER, IN-OH	15N	0.00	681,133.00	0.00	4,410,273.00	1
6	GREENS FORK	18N	0.00	681,306.00	0.00	4,410,319.00	1
7	CAMBRIDGE CITY	15N	0.00	680,458.00	0.00	4,410,392.00	1
8	NEW PARIS, OH-IN	13N	0.00	682,001.00	0.00	4,410,743.00	1
9	FOUNTAIN CITY	18N	0.00	680,074.00	0.00	4,410,707.00	1
10	WHITEWATER, IN-OH	15N	0.00	681,962.00	0.00	4,410,761.00	1
11	NEW PARIS, OH-IN	13N	0.00	681,496.00	0.00	4,410,834.00	1
12	GREENS FORK	17N	0.00	681,000.00	0.00	4,410,861.00	1
13	RICHMOND	14N	0.00	679,614.00	0.00	4,411,105.00	1
14	GREENS FORK	18N	0.00	680,167.00	0.00	4,411,235.00	1
15	WHITEWATER, IN-OH	15N	0.00	679,294.00	0.00	4,411,261.00	1
16	RICHMOND	14N	0.00	681,036.00	0.00	4,411,383.00	1
17	RICHMOND	14N	0.00	679,810.00	0.00	4,411,725.00	1
18	RICHMOND	14N	0.00	681,014.00	0.00	4,412,147.00	1

Boreholes Drilled to Bedrock

#	AQUIFER ELEVATION	BAIL ERRT	BAILER DR	BAILER HR	BEDROCK ELEVATION
1	0.00	0.00	0.00	0.00	826.00
2	0.00	0.00	0.00	0.00	816.00
3	0.00	0.00	0.00	0.00	956.00
4	0.00	0.00	0.00	0.00	905.00
5	0.00	0.00	0.00	0.00	912.00

#	CASING D	CASING L	CASING M	COUNTY	DEPTH
1	16.00	40.00	No Data	WAYNE	60.00
2	26.00	41.00	No Data	WAYNE	62.00
3	0.00	0.00	No Data	WAYNE	0.00
4	6.00	25.00	No Data	WAYNE	25.00
5	2.00	18.00	PVC	WAYNE	28.00

#	DEPTH TO BEDROCK	DTM COMP DATE	GRND ELEV	GROUT M	GROUT T
1	54.00	April 4, 1954	880.00	No Data	0.00
2	62.00	January 19, 1956	878.00	No Data	0.00
3	98.00	August 23, 1983	1,054.00	No Data	0.00
4	25.00	August 3, 1983	930.00	No Data	0.00
5	28.00	October 17, 1994	940.00	BENT CEMENT	1.00

#	LINER DIA	LINER TOT	LOCATION TYPE	OWNER	OWNER ADDRESS
1	0.00	0.00	Field Located	RICHMOND WATER WORKS CO	No Data
2	0.00	0.00	Field Located	RICHMOND WATER WORKS	No Data
3	0.00	0.00	Field Located	GREG PYLE	118 S 21ST ST RICHMOND, IN
4	0.00	0.00	Estimated Location/TRS_quarter sections_county	WAYNE BANK	S A & 5TH RICHMOND, IND
5	0.00	0.00	Field Located	INDIANA GAS	1630 N MERIDIAN ST.,

#	OWNER TX	PUMP DW	PUMP HOUR	PUMP RATE	PUMP SET
1	No Data	32.50	0.00	872.00	0.00
2	No Data	17.00	0.00	1,016.00	0.00
3	No Data	0.00	0.00	0.00	0.00
4	No Data	0.00	0.00	0.00	0.00
5	(317)926-3351	0.00	0.00	0.00	0.00

#	PUMP TYPE DESC	RANGE	REFERENCE NUMBER	REPORT	RESERVE NAME
1	No Data	1W	232943	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=232943&amp;_from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=232943&amp;_from=SUMMARY&amp;_action=Details</a>	No Data
2	No Data	1W	232958	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=232958&amp;_from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=232958&amp;_from=SUMMARY&amp;_action=Details</a>	No Data
3	No Data	1W	232908	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=232908&amp;_from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=232908&amp;_from=SUMMARY&amp;_action=Details</a>	No Data
4	No Data	1W	232938	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=232938&amp;_from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=232938&amp;_from=SUMMARY&amp;_action=Details</a>	No Data
5	No Data	1W	318314	<a href="https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=318314&amp;_from=SUMMARY&amp;_action=Details">https://secure.in.gov/apps/dnr/water/dnr_waterwel/?refNo=318314&amp;_from=SUMMARY&amp;_action=Details</a>	No Data

#	RESERVE NUMBER	SCREEN D	SCREEN LEVEL	SECTION	STATIC
1	0	0.00	0.00	5	6.20
2	0	0.00	0.00	5	7.50
3	0	0.00	0.00	4	0.00
4	0	6.00	5.00	5	15.00
5	0	2.00	10.00	32	0.00

#	TOPO	TOWNSHIP	UTM X	UTM X NAD83	UTM Y	UTM Y NAD83	Count
1	RICHMOND	13N	679665	679663	4,409,374.00	4409589	1
2	RICHMOND	13N	679853	679851	4,409,554.00	4409769	1
3	RICHMOND	13N	681825	681823	4,410,600.00	4410815	1
4	RICHMOND	13N	0	680079	0.00	4410806	1
5	RICHMOND	14N	679716	679714	4,410,703.30	4410918	1

**Record of Water Well**

**Indiana Department of Natural Resources**

<b>Reference Number</b> 232938	<b>Driving directions to well</b> N SIDE OF LOT AT SW 5TH & S A ST IN RICHMOND	<b>Date completed</b> Aug 04, 1983
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<b>Owner-Contractor</b>	<b>Name</b>	<b>Address</b>	<b>Telephone</b>
Owner	WAYNE BANK	S A & 5TH RICHMOND, IND	
Driller	EMPORIUM SALES	CONNERSVILLE, IND	
Operator	LARRY GARD	License: null	

<b>Construction Details</b>			
Well	<b>Use:</b> Industry	<b>Drilling method:</b> Bucket Rig	<b>Pump type:</b>
	<b>Depth:</b> 25.0	<b>Pump setting depth:</b>	<b>Water quality:</b>
Casing	<b>Length:</b> 25.0	<b>Material:</b>	<b>Diameter:</b> 6.0
Screen	<b>Length:</b> 5.0	<b>Material:</b>	<b>Diameter:</b> 6.0 <b>Slot size:</b> .050

<b>Well Capacity Test</b>	<b>Type of test:</b>	<b>Test rate:</b> gpm for hrs.	<b>BailTest rate:</b> gpm for hrs.
	<b>Drawdown:</b> ft.	<b>Static water level:</b> 15.0 ft.	<b>Bailer Drawdown</b> ft.

<b>Grouting Information</b>	<b>Material:</b>	<b>Depth:</b> from to
	<b>Installation Method:</b>	<b>Number of bags used:</b>

<b>Well Abandonment</b>	<b>Sealing material:</b>	<b>Depth:</b> from to
	<b>Installation Method:</b>	<b>Number of bags used:</b>

<b>Administrative</b>	<b>County:</b> WAYNE	<b>Township:</b> 13N <b>Range:</b> 1W
	<b>Section:</b> NE of the NW of the NE of Section 5	<b>Topo map:</b> RICHMOND
	<b>Grant Number:</b>	
	<b>Field located by:</b>	<b>on:</b>
	<b>Courthouse location by:</b>	<b>on:</b>
	<b>Location accepted w/o verification by:</b> L WILLE	<b>on:</b> Jul 01, 1985
	<b>Subdivision name:</b>	<b>Lot number:</b>
	<b>Ft W of EL:</b>	<b>Ft N of SL:</b>
	<b>Ft E of WL:</b>	<b>Ft S of NL:</b>
	<b>Ground elevation:</b> 930.0	<b>Depth to bedrock:</b> 25.0
	<b>UTM Easting:</b>	<b>Bedrock elevation:</b> 905.0
		<b>UTM Northing:</b>
		<b>Aquifer elevation:</b>

<b>Well Log</b>	Top	Bottom	Formation
	0.0	15.0	HARD TAN CLAY
	15.0	16.0	GRAV & WATER
	16.0	25.0	BLUE CLAY

**Comments** GREENVILLE TREATY;

## Record of Water Well

### Indiana Department of Natural Resources

<b>Reference Number</b> 407138	<b>Driving directions to well</b> ON THE SOUTH SIDE OF HOPEWELL RD WEST OF ST RT 27. 3527 HOPEWELL RD FOUNTAIN CITY	<b>Date completed</b> Jul 25, 2007
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Owner-Contractor	Name	Address	Telephone
Owner	PRIME PROPERTY REALTY	100 S 5TH ST RICHMOND, IN	(765) 914-7531
Driller	WILEY WELL DRILLING, INC	7774 E ST RD 32 UNION CITY, IN	(765) 584-8648
Operator	CHUCK SEIBER	License: 1856	

#### Construction Details

Well	<b>Use:</b> Home	<b>Drilling method:</b> Rotary	<b>Pump type:</b>
	<b>Depth:</b> 147.0	<b>Pump setting depth:</b>	<b>Water quality:</b> CLEAR
Casing	<b>Length:</b> 144.0	<b>Material:</b> PVC	<b>Diameter:</b> 5.0
Screen	<b>Length:</b> 3.0	<b>Material:</b> PVC	<b>Diameter:</b> 5.0 <b>Slot size:</b> .020

<b>Well Capacity Test</b>	<b>Type of test:</b> Air	<b>Test rate:</b> 50.0 gpm for 1.0 hrs.	<b>BailTest rate:</b> gpm for hrs.
	<b>Drawdown:</b> 25.0 ft.	<b>Static water level:</b> 62.0 ft.	<b>Bailer Drawdown:</b> ft.

<b>Grouting Information</b>	<b>Material:</b> BENSEAL & E-Z MUD	<b>Depth:</b> from 0.0 to 136.0
	<b>Installation Method:</b> PUMPED	<b>Number of bags used:</b> 9.0

<b>Well Abandonment</b>	<b>Sealing material:</b>	<b>Depth:</b> from to
	<b>Installation Method:</b>	<b>Number of bags used:</b>

<b>Administrative</b>	<b>County:</b> WAYNE	<b>Township:</b> 18N <b>Range:</b> 14E
	<b>Section:</b> SW of Section 22	<b>Topo map:</b> FOUNTAIN CITY
	<b>Grant Number:</b>	
	<b>Field located by:</b>	<b>on:</b>
	<b>Courthouse location by:</b>	<b>on:</b>
	<b>Location accepted w/o verification by:</b>	<b>on:</b>
	<b>Subdivision name:</b>	<b>Lot number:</b>
	<b>Ft W of EL:</b>	<b>Ft N of SL:</b>
	<b>Ft E of WL:</b>	<b>Ft S of NL:</b>
	<b>Ground elevation:</b>	<b>Depth to bedrock:</b>
		<b>Bedrock elevation:</b>
	<b>UTM Easting:</b>	<b>UTM Northing:</b>
		<b>Aquifer elevation:</b>

Well Log	Top	Bottom	Formation
	0.0	14.0	BROWN CLAY
	14.0	23.0	GRAY CLAY
	23.0	32.0	GRAVEL & CLAY
	32.0	63.0	GRAY CLAY
	63.0	72.0	GRAVELY & CLAY
	72.0	130.0	GRAY CLAY
	130.0	138.0	GREEN CLAY
	138.0	140.0	GRAVEL
	140.0	144.0	GREEN CLAY

144.0	147.0	GRAVEL
147.0	154.0	BROWN CLAY

**Comments**

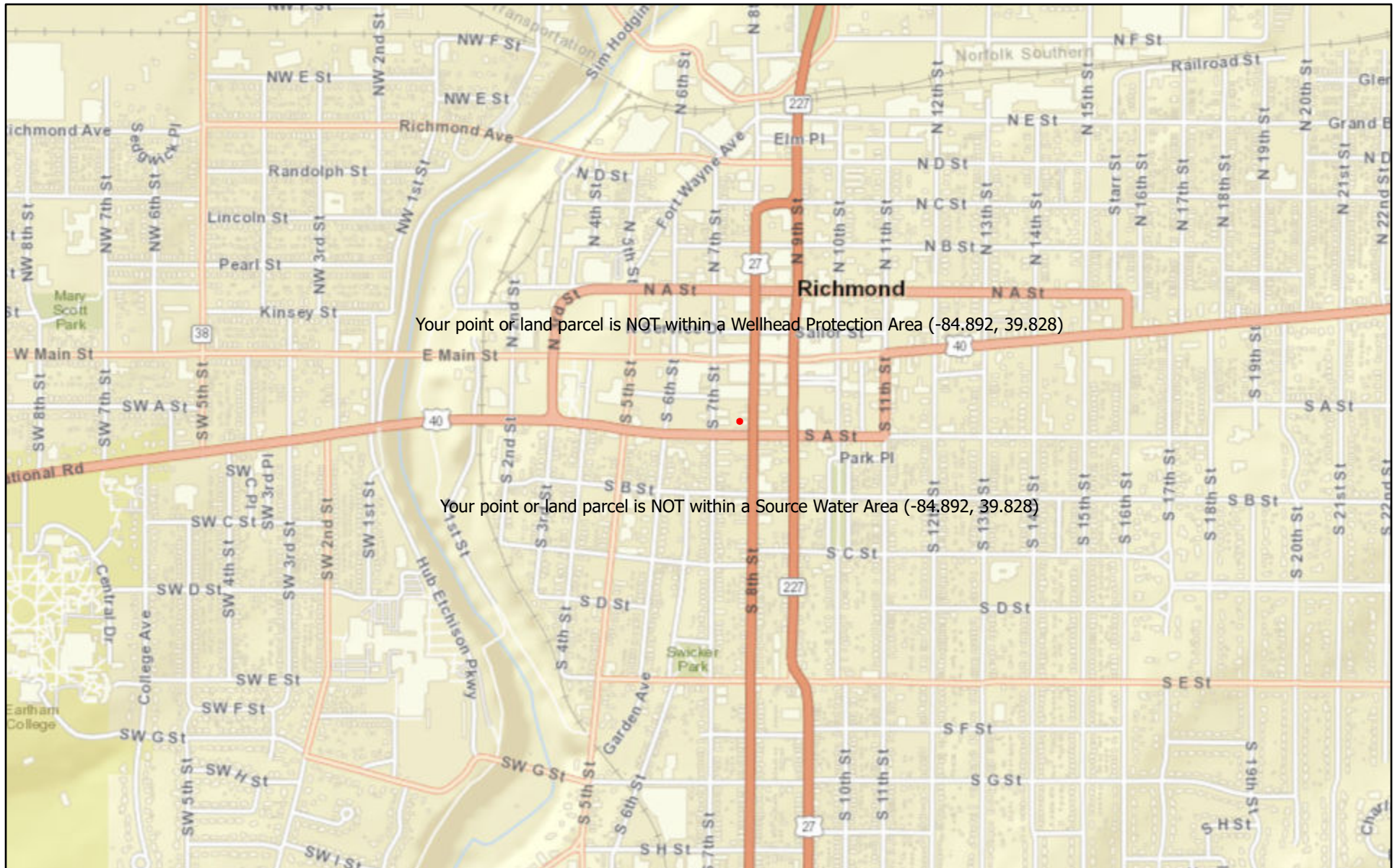
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## **ATTACHMENT F**

### *IDEM SOURCE WATER PROXIMITY MAP*

# IDEM Source Water Proximity



June 18, 2024

