State of Illinois
Pat Quinn, Governor

Illinois Environmental Protection Agency
Lisa Bonnett, Director

Fact Sheet # 1

300 West LLC and Arnold Magnetic Technologies Corporation
300 N. West Street, Marengo, McHenry County, Illinois

Background

Arnold Magnetic Technologies is located on a site that was used as a generating station for an electric interurban railroad since the late 1880s and, since approximately the 1930s, magnet products manufacturing has occurred and continues today. Historical chlorinated solvent use on the site is presumed to be the cause of a threat to area groundwater.

Volatile organic compounds (VOCs) including chlorinated solvents tetrachloroethylene (PCE), trichloroethylene (TCE) and 1,1,1-trichloroethane (TCA) and breakdown products cis-1,2-dichloroethylene (cis-1,2-DCE), trans-1,2-dichloroethylene (trans-1,2-DCE), 1,2-Dichloroethane (1,2-DCA), 1,1-dichloroethylene (1,1-DCE), and vinyl chloride have been detected in groundwater associated with the facility (the Site) owned by 300 West LLC and operated by The Arnold Engineering Co. a/k/a Arnold Magnetic Technologies Corporation. VOCs are man-made chemicals commonly found in cleaning solvents. The area potentially affected by this contamination is called the Area of Concern (see Figure 1).

In May 2013, Illinois EPA staff and the facility's consultants conducted sampling of private wells in the Area of Concern for residents and businesses. 300 West LLC, the Site owner, provided bottled water to residents whose wells had unacceptable levels of VOCs. Illinois EPA is currently working with the Illinois Office of the Attorney General to require 300 West LLC and Arnold Magnetic Technologies to provide bottled water to the properties where groundwater has been contaminated and to take additional steps to investigate and clean up the Site.

What contaminants were found at this site?

Chlorinated solvent chemicals and breakdown products have been detected in the soil and groundwater. The highest concentrations found in groundwater on-site during 2010-2011 are (in milligrams per liter, mg/L):

- Tetrachloroethylene (PCE): 0.12 mg/L
- Trichloroethylene (TCE): 0.01 mg/L
- 1,1,1-trichloroethane (1,1,1-TCA) 0.3 mg/L
- 1,1-dichloroethylene (1,1-DCE): 0.044 mg/L

Additionally, in off-site wells, the following were detected:

- cis-1,2-dichloroethylene (cis-1,2-DCE): 0.019 mg/L
- trans-1,2-dichloroethylene (trans-1,2-DCE): 0.0058 mg/L
- Vinyl Chloride: 0.0025 mg/L

What are the Class I groundwater standards for these chemicals?

• PCE	0.005 mg/L
• TCE	0.005 mg/L
• 1,1,1-TCA	0.2 mg/L
• 1,1-DCE	0.007 mg/L
• 1,2-DCA	0.005 mg/L
• Vinyl Chloride	0.002 mg/L
• Cis-1,2-DCE	0.07 mg/L
• Trans-1,2-DCE	0.10 mg/L

Were any contaminants found on the Site but not in the off-site wells?

Yes. Other groundwater contaminants such as metals were found in some on-site wells during 2010-2011:

	Amount Detected	Class I Standard
• Aluminum	44.0 mg/L	3.5 mg/L
• Iron	360.0 mg/L	5.0 mg/L
• Lead	0.17 mg/L	0.0075 mg/L
• Manganese	31.0 mg/L	0.15 mg/L

What should I do if sampling results show levels above Class I Groundwater Standards?

Illinois EPA sends the laboratory results to the Illinois Department of Public Health (IDPH), and IDPH sends a letter to each well owner explaining the sampling results and providing recommendations about any changes in water use.

What adverse health effects are associated with exposure to VOCs?

Exposure to low levels over long periods of time may be associated with impaired immune system function, kidney or liver damage, and may increase the risk of cancer.

Is the company taking action for the contamination?

The owner of the site, 300 West LLC, has acted promptly in responding to the immediate concerns raised by the discovery of contamination in private and non-community water wells and have indicated their willingness to continue to investigate and correct contamination related to the site.

What are the next steps?

Illinois EPA is pursuing a court order through the Illinois Office of the Attorney General to compel the site owner and operator to complete certain tasks by a specific timeline. These tasks include:

- Providing bottled water to well owners whose wells have site-related contamination;
- Conduct regular sampling of the private and semi-private wells in the Area of Concern;
- Evaluate long-term alternate water supplies and implement them if necessary; and
- Prepare a schedule for further investigative and corrective activities.

For more information, you may contact:

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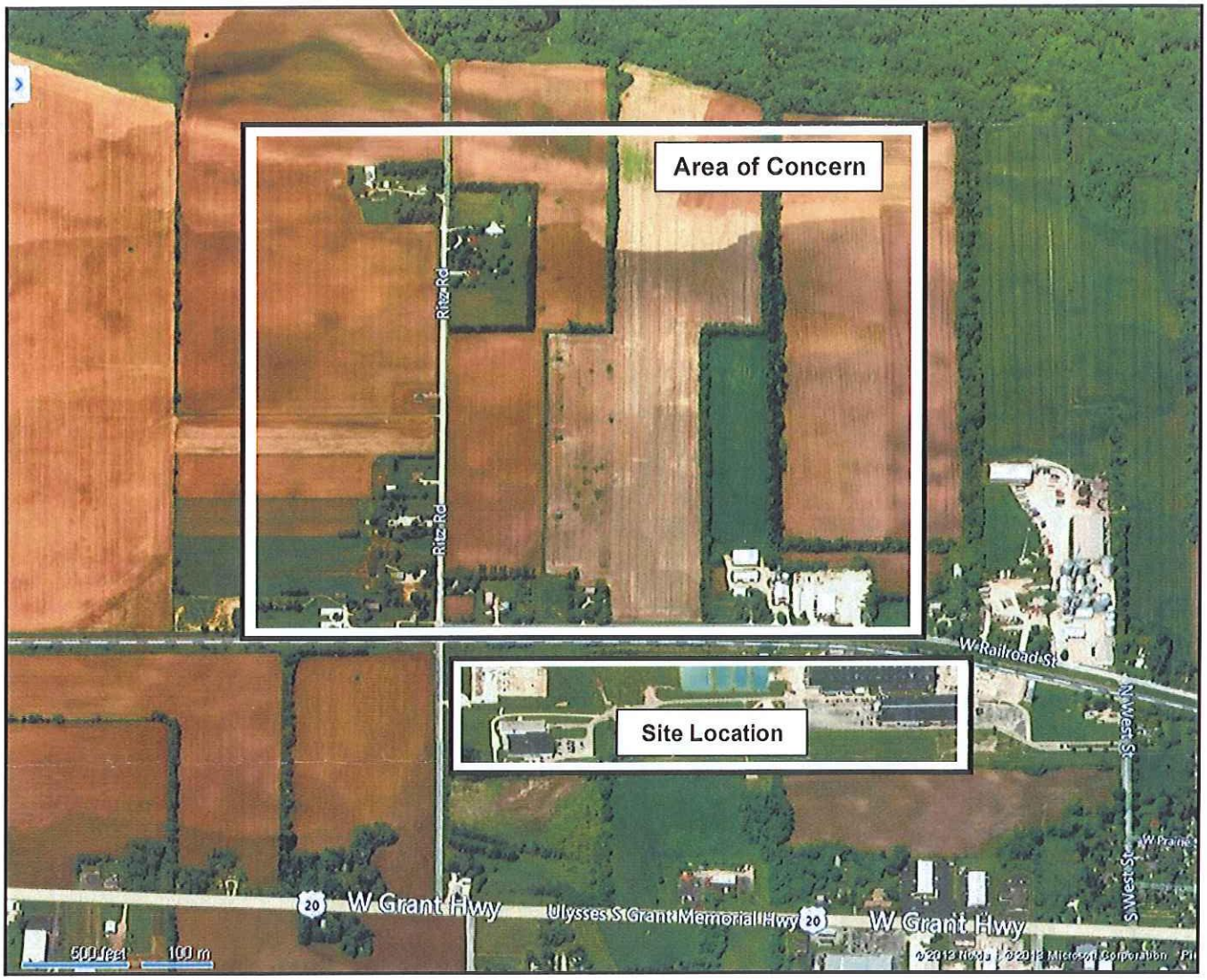
Figure 1: Arnold Magnetics Site Right-to-Know Notice Area