



# Marion County Wellfield Education Corporation

## Summary Report Wellfield Protection Education Activities Calendar Year 2014

### Marion County Wellfield Protection Areas



### Wellfield Facts:

- There are 7 Wellfield Protection Areas in Marion County.
- 13.8 billion gallons of drinking water is pumped from 76 wells in the Wellfield Protection Areas each year.
- There are 19,975 acres of land in the Wellfield Protection Areas.
- Land Use in the Wellfield Protection areas includes: 58% Residential; 26% Business & Industry; and 16% Open Space.
- Over 1.2 million people live, work, or travel through Wellfield Protection Areas each day.

*Wellfield Facts collected from the City of Indianapolis, Indianapolis Water, Lawrence Utilities, and Speedway Waterworks. (March 2003)*



## Summary Report Marion County Wellfield Education Corporation (MCWEC) Wellfield Protection Education Activities Calendar Year 2014

### Introduction

The Marion County Wellfield Education Corporation (MCWEC) is a 501(3)c non-profit corporation established in 1997 by the Marion County Wellfield Protection Zoning Ordinance to support protection of groundwater and drinking water supplies in Indianapolis. Its mission is:

*“To prevent contamination to the groundwater resource of Marion County through public awareness and education.”*

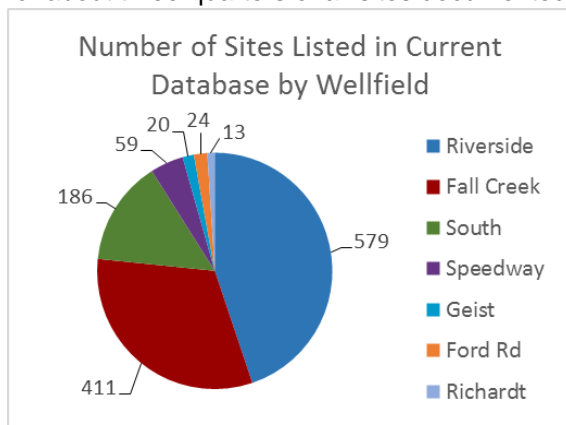
MCWEC was given the responsibility for carrying out the following activities:

- 1) Educating the public about ground water concerns and wellfield protection;
- 2) Educating and providing technical assistance to businesses in Wellfield Protection Districts as to the proper use and storage of materials, as well as general wellfield education;
- 3) Overseeing the registration of potential business/commercial contaminant sources located within the Marion County wellfields to assist the water utilities in fulfilling their reporting requirements for the state wellhead protection program; and
- 4) Evaluating the effectiveness of wellfield protection program components.

This report summarizes the wellfield status as of January 2015, and provides highlights of the various educational activities completed from September 2013 through the 2014 calendar year time period.

### Wellfield Business Summary

In the 7 Marion County wellfields (Riverside, Fall Creek, South, Speedway, Richardt, Ford Road and Geist), there are currently 1,292 sites listed in the most recent database of potential sources of contamination. Ongoing site visits will continue to identify the nature of the business activities and quantify how many of the sites are currently active businesses. The database of potential sources represent current operations that have the potential to impact the drinking water supply should they release chemicals through leaks or spills at the facility. The Riverside and Fall Creek Wellfields account for about three-quarters of all sites documented in the potential source database.



Within these wellfield protection zones, there are 513 known facilities in the wellfields that are registered with IDEM as actively generating or temporarily accumulating hazardous wastes as part of their normal operations. Of the registered facilities, there are 292 known underground storage tanks (USTs), 125 leaking underground storage tanks (LUSTs), and 295 other registered hazardous waste facilities. An additional 779 unregistered businesses in the wellfields have been identified on a drive survey conducted by MUNDELL personnel during 2014. At least 320 of the businesses identified on the MUNDELL drive survey currently pose no known threat to the wellfield protection zones.

### **Summary of Calendar Year 2014 Education Program**

In order to prevent or minimize future chemical leaks or spills from impacting the drinking water supply, the MCWEC educational program focuses on direct contact and technical support for the actively operating wellfield businesses identified as potential contaminant sources. This technical support involves reviewing facility chemical product and waste management procedures in order to recommend modifications that will minimize the potential for releases into the wellfield groundwater. Participation in the program is voluntary, and requires the businesses to ask for the free consulting support including Detailed On-Site Assessments offered by the MCWEC program.

The following business education tasks were completed by Mundell & Associates, Inc. (MUNDELL) under a technical support contract with MCWEC:

- 1) Continued contacting and updating information for existing active businesses. Site-specific visits to facilities by MUNDELL were limited by 'request only' during 2014 due to lack of authorization by MCWEC board based on board unfilled vacancies. Information about the MCWEC program was provided on an 'as-requested' basis, along with business self-assessment packets and best business practice guides.
- 2) Continued Detailed On-site Assessments. In total, less than 5 Detailed On-Site Assessments were completed in 2014, including auto repair and maintenance, printing, and laundry facilities.
- 3) Distribution of spill response containment equipment and supplies to businesses was not provided by MUNDELL during 2014 due to lack of authorization by MCWEC board.
- 4) Updated and maintained the Potential Source Inventory (PSI)/Education Database based on business education efforts.
  - a. Merged data from Indiana Department of Environmental Management (IDEM) databases for registered underground storage tanks (USTs), leaking underground storage tanks (LUSTs), community right to know (CRTK – 2013), and hazardous waste generation and temporary accumulation (RCRA), solid waste facilities, and hazardous waste notifiers (HWN). There are currently 513 unique businesses located within the wellfields that are listed in at least one of those databases.
  - b. Conducted drive surveys to verify each business listed on the PSI/Education database as well as identify businesses which were previously not documented on the PSI database. When identifying new sites on the wellfields, the focus was directed at recording potential contaminant sites. MUNDELL, however, recorded non-potential contaminant source sites in order to include in the PSI database the site history information for all businesses located on the wellfield protection areas.
    - i. 370 entries previously listed in the PSI/Education database were updated to reflect the current site's business activities; and
    - ii. 375 new sites were added to the PSI/Education database. Of the new sites, 37 were Automotive Maintenance/ Sales related; 14 were Chemical / Industrial Process related; 10 were Fuel Sales related; 2 were Dry Cleaning / laundromat related; 102 were Miscellaneous businesses that could be a potential source of contaminant; 210 were Miscellaneous businesses that pose no threat.
  - c. Created detailed instructional guidelines for updating the PSI/Education database. These guidelines will increase the efficiency of future database maintenance and as a result will maximize the accuracy of the sometimes constantly changing business records. Increased database upkeep efficiency will also allow for more time and focus to be directed towards other project goals.
- 5) Generated maps using ArcGIS to display the locations of potential sources of contamination on the wellfield protection zones. These maps were based on the updated PSI/Education Database and will help to manage and plan future site visits more efficiently. The maps will also provide an effective visual representation of the potential wellhead contaminant sources.
- 6) Continued to provide technical support and answer questions from business owners regarding best practices and facility maintenance.



- 7) Updated and monitored the MCWEC website ([www.INDYH20.org](http://www.INDYH20.org)) including the following activities:
  - a. Posted notices for MCWEC meetings and Indy Rezone Open house;
  - b. Received email from peer mentor at Goodwin Community Center thanking MCWEC for educational resources and links which they had incorporated into study sessions and activities; and
  - c. Analyzed website visitor data. Approximately 500 new viewers from Indiana visited the site during 2014. Top pages viewed were "Wellfield FAQs," "Resources," and "Neighborhood Partner Program."
- 8) MUNDELL and other representatives of MCWEC provided technical input into a revised wellfield protection zoning ordinance through Indy Rezone activities, and a revised Marion County Health Department (MCHD) ordinance which will include the active review and monitoring of new and existing facilities within the wellfield protected zones of Marion County.
- 9) Updated the Dry Cleaner Guidance and Vehicle Maintenance Guidance documents for use by wellfield facilities.
- 10) Created an ad describing the importance of groundwater protection and the MCWEC program, featured in the November 2013 Lawrence Utilities Newsletter.
- 11) Provided radio underwriting spots for WFYI public radio that featured MUNDELL's ongoing work activities in the MCWEC program.

### **Existing Tools for Promoting Wellhead Protection**

The MCWEC business education program has developed a number of practical tools available to participating businesses for helping them understand when pollution prevention is needed, what are appropriate facility design and operational practices to improve existing facilities, and the available free technical consulting for facility design modifications or waste handling practices. The following support documents are currently being used as part of the educational program:

- 1) *Business Self-Assessment Guidebook for Wellhead Protection*, Updated January 2012
  - describes MCWEC's voluntary self-assessment program including the use of an environmental screening questionnaire and on-site facility evaluations.
- 2) *Good Business Practices for Wellhead Protection*, Updated January 2012
  - provides general facility and operational improvements for handling chemical and waste product and transfer to reduce the risk of impacting the City's water supplies.
- 3) *Business Self-Assessment Questionnaire*, Updated January 2012
  - provides a detailed list of questions that facility managers can answer in order to determine whether pollution prevention activities should be implemented at the facility.
- 4) *MCWEC Program Brochure*, Updated March 2012
  - provides a general description of the MCWEC program and information regarding the importance of wellhead protection.
- 5) *Vehicle Maintenance Shop Guidance, Best Management Practice Summary, Marion County Wellhead Protection*, Updated October 2013 (English & Spanish)
  - provides a summary of specific pollution prevention practices for vehicle maintenance shops.
- 6) *Dry Cleaners Guidance, Best Management Practice Summary, Marion County Wellhead Protection*, Updated October 2013 (English & Spanish)
  - provides a summary of specific pollution prevention practices for dry cleaners.
- 7) *Facility Design and Operations Guidance for Wellfield Protection*, Updated January 2012



- provides the kind of requirements specified in the design, construction and operation of new facilities in the wellfield areas as requested by the Technically Qualified Person (TQP) under Marion County's Wellfield Protection Ordinance.
- 8) *MCWEC Detailed On-site Assessment Brochure*, Updated April 2012
  - provides a summary of the voluntary assessment program with benefits of participation.
- 9) *MCWEC Website*, [www.INDYH20.org](http://www.INDYH20.org), Updated July 2014
  - provides internet information for existing and future businesses located in Marion County wellhead protection areas.

The ultimate purpose for these support tools is simply to help existing businesses reduce the future risk of negatively impacting the City's water supplies by properly designing and operating their facilities to achieve this goal.

### **Overall Business Education Program Successes and Challenges**

Since the initiation of the program in 2001, the education program has been able to make contact with all operating businesses located in the wellfields and increase the awareness of wellhead protection in these areas. The program has provided over 120 Detailed On-Site Assessments to business owners, providing free pollution prevention consulting and recommendations for improved waste management. In addition, free spill prevention materials and equipment have been provided to those facilities requesting support for controlling potential releases. The educational approach has been, in accordance with the wellfield ordinance, a voluntary program with a non-threatening, non-regulatory approach used.

The most significant challenge under the current educational program remains the need for increased voluntary participation by the wellfield businesses in order to achieve the goals of the program. Although direct contacts with wellfield businesses have been made prior to 2014 and materials provided, requests for Detailed On-Site Assessments have come from less than 10 percent of the identified potential chemical sources in the wellfields. In addition, the large turnover rate of managers and personnel at operating facilities, as well as the closing and opening of new businesses result in the loss of institutional knowledge and the need for aggressive follow-up contacts in order to maintain awareness of the program and the need for maintaining ongoing protection activities.

Another challenge being faced is the future education of the existing wellfield businesses about any possible changes that will occur as a result of the Indy Rezone efforts by the City of Indianapolis. Opportunities for updating the existing contaminant sources by site visits or other means on how those changes will affect their daily operations should be planned in advance in order to achieve compliance.

### **2015 Future Activities**

MUNDELL will continue to visit and work with the businesses located in Marion County's wellfields on a continuous basis as the MCWEC contract scope of work allows. The PSI and Education databases will continue to be managed, and updated, and provided to Citizens Energy Group for maintaining its wellhead protection plans with the Indiana Department of Environmental Management.

Based on the requirements of the current Wellfield Ordinance, one of the key requirements for MCWEC is the evaluation of the effectiveness of the wellfield protection program components. As a result of the pre-2014 low interest in Detailed On-Site Assessments from business owners and the upcoming changes to the wellfield ordinance, a change in strategy to encourage program participation is in order. A significant budget allocation to allow for not only the providing of free spill containment equipment (spill kits and/or pallets) in all W-1 areas continues to be needed, but also support activities for assistance in re-design of existing facilities.

MUNDELL would also like to be able to notify business owners explicitly of some of the changes they should expect in the upcoming Indy Rezone Wellfield Ordinance which might impact the way in which they conduct their business and handle their waste. This will allow businesses the opportunity to prepare in advance for any necessary modifications to their operations and request technical assistance. It is believed that this approach will allow for better participation in the MCWEC program and will help open the doors to some of the more egregious offenders that have been observed during site visits.

MUNDELL will also work with the MCWEC Board of Directors and the Marion County Health Department to identify different ways to measure the program's effectiveness. Examples of parameters for measurement may include: types of businesses, number of employees, presence of spill containment equipment, or whether there has been any improvement since the last visit. Additionally, with the possibility of the Health Department rolling out increased enforcement as part of the new ordinance, MUNDELL would like to be able to compare notes with the Health Department regarding observations and recommendations made during site visits while still maintaining confidentiality for those businesses participating in the MCWEC program.

MUNDELL believes that increased use of the MCWEC internet website ([www.INDYH20.org](http://www.INDYH20.org)) to provide all technical support information, including updated answers to frequently asked questions (FAQs), design standards, and free support is essential, and should be planned in order to allow all businesses full access to information that will be helpful to them. Reporting of website data including number of visitors and types of information requests will be included in future reports.



## ATTACHMENTS

### UPDATED GIS MAPS

**Hazardous Waste 2014**  
**UST & LUST 2014**  
**Additional Sites 2014**

