Summary of Investigations of Current and Historical Facilities

3/2/2016

The Riverside Ground Water Contamination site is located in a heavily developed area consisting of industrial, commercial and residential land, where numerous past industrial and commercial activities could have contributed to the Riverside and White River municipal well contamination (Ref. 4, pp. 54-63; see Figure 1-4 of the HRS documentation record).[1]

The Indiana Department of Environmental Management (IDEM) conducted an extensive search for possible sources of the ground water contamination. A list of facilities identified and/or investigated during IDEM's search is presented in the table below, followed by a more detailed description of each. Many of these facilities have been associated with solvents; however, attribution to any one or more specific sources or operations has not been determined at this time (Ref. 4, pp. 375-385).

Name	Investigation	Date	Samples	Substances	Comments	References
Former Karstadt Reed Cleaners	Further Site Investigation (FSI)	September 30, 2013	Ground Water and Soil Samples	PCE	Ground Water contamination has been confirmed on site. Site is being addressed by IDEM's State Cleanup Program	Refs. 6, pp. 2, 4, 21, 22, 23, 24
Former Shuron	Second Quarter 2011 Ground Water Sampling Event	July 29, 2011	Soil and Ground Water Samples	TCE PCE	Ground Water contamination has been confirmed on site. Site is being addressed by IDEM's Voluntary Remediation Program	Refs. 7, pp. 2, 4, 8-14;
National Sandblasting	Emergency Inspection	September 11, 1987	None	PCE	Workers were applying sealant to swimming pool filtration tanks. The workers had been overcome and one had to be taken to the hospital. Sealant contained PCE.	Ref. 9, pp. 1, 2
Former Carrier Bryant	EPA OSC POLREP	June 13, 2013	Soil and Ground Water Samples	TCE Methyl Ethyl Ketone	TCE and PCE have been confirmed in ground water and soil.	Refs. 38, p. 2

[1] All references cited correspond to the references within the Riverside Ground Water Contamination HRS package.

Name	Investigation	Date	Samples	Substances	Comments	References
Component Machines	Site Investigation Report	September 20, 2007	Ground Water	PCE TCE Cis-1,2, DCE	Ground Water sampling results map indicates ground water contamination.	Ref. 41, pp. 5, 16, 18, 20, 23
Flexdar	Subsurface Investigation Report #4 Aquifer Pump Test Report/ Risk Evaluation for properties	February 5, 2013	Ground Water	PCE TCE	TCE as high as 1,600 mg/kg in soils and as high as 145,000 ug/l in ground water	Ref. 17, pp. 1, 2
Brownfield Redevelopment	Risk Evaluation for properties in the Redevelopment project	October 9, 1997	Ground Water	TCE Petroleum Hydrocarbons	Concentrations of TCE, 1,1,1-TCA, cis-1,2 DCE, 1,1 DCA, and 1,1,1 TCA were detected in the ground water.	Ref. 66, pp.7-9
Forty-Five Minutes Cleaners	Notice of Violation Letter	February 13, 1995	None	Since the property is a former Dry Cleaner, PCE is potential contaminant	Notice of Violations has not been attained.	Ref. 14, p. 1, 2
Bodycote	Preliminary Assessment/ Visual Site Inspection	October 21, 1992	None	TCE	The facility has two vapor degreasing units which use TCE.	Refs. 29, p. 2; 89, p. 1; 99, pp. 1-2
Former Stewart Manufacturing	Phase III Investigation Report	May 31, 2007	Soil and Ground Water Samples	PCE TCE 1,1,1 TCA	760 tons of impacted soils were removed and properly disposed off site	Ref. 51, pp. 12, 65, 66, 68, 81, 82, 87, 91-95, 98, 99
Former Fame Laundry/ Michaelis Development	Soil Vapor Extraction System Startup and Optimization Report	May 1, 2009	Soil and Ground Water Samples	PCE TCE	Soil and ground water has been impacted. A soil vapor extraction system has been installed to remediate the contamination	Ref. 50, pp. 3, 4, 5, 6, 7
Brownfield Redevelopment Project/Martin Luther King avenue and 16th Street	Risk Evaluation for Properties in the Redevelopment Project	March 9, 1998	Ground Water	TCE	According to a TCE Concentrations in Ground Water Map, TCE was detected 1.1 ppm at a depth of 31 feet.	Ref. 20, pp. 1, 35, 39

Name	Investigation	Date	Samples	Substances	Comments	References
Lincoln Technical Institute	Hazardous Waste Handler Identification Form- Notification of Hazardous Waste Activity	May 24, 2002	None	F002 and F004 waste was reported on the Notification of Hazardous Waste Activity Form	The Site was listed as a Conditionally Exempt Small Quantity	Ref. 11, pp. 1-8
Goodwill Industries of Central Indiana, Inc	Hazardous Waste Handler Identification Form- Notification of Hazardous Waste Activity	February 20, 2002	None	F002 and D001 waste was reported on the Notification of Hazardous Waste Activity Form	The Site was listed as a Conditionally Exempt Small Quantity	Ref. 13, pp. 1, 13, 14
Printing Partners Inc	RCRA subtitle C Site Identification Form	June 28, 2013	None	D001, D002, D-011, D018, and D039 waste is listed	The Site was listed as a Small Quantity	Ref. 15, pp. 1-4
McBroom Electric	Conditionally Exempt Small Quantity Generator Letter/	July 30, 1998	None	Notification of Regulated Waste Activity notice of D040 and F001 waste	There was a one-time clean up at the facility. Since the cleanup is complete, they want to revert back to a conditionally exempt small quantity generator.	Ref. 19, pp. 1, 2, 4; 32, p. 1
Currently Kash Dry N Cleaner AKA Jim's Cleaners	Inspection results	October 23, 2001	None	The facility, a dry cleaner, generates an F002 waste.	The facility was found to be in compliance with the hazardous waste regulations. The facility is a Small Quantity Generator	Ref. 22, pp. 3, 5, 6, 11
Dickey and Son Machine and Tool Company	Phase I Environmental Site Assessment Update	August 13, 2009	Ground Water	Cis-1,2-DCE TCE	Tool and Die shop, TCE and Cis-1,2-DCE detected in on-site ground water	Ref. 23, pp. 1, 6, 25
Morleys Cleaners	Field Sheet; Notification of Regulated Waste Activity	April 24, 1999	None	PCE F002 Waste	(2) 30-35 gallons drums were abandoned on this property and contained perchloroethylene. There was about one shovel of material spilled onto the ground.	Ref. 8, p.1; 24, p. 4

Name	Investigation	Date	Samples	Substances	Comments	References
Johnson Controls Inc	Hazardous Waste Generator Satus/Handler Identification Form	October 8, 2004/September 17, 2004	None	F002 Waste	Small Quantity Generator	Ref. 26, pp. 1, 9
Peerless Pump (AKA Sterling Fluid Systems)	Inspection Summary Letter	May 30, 2002	None	D006 Parts Washer Solvent Used Oil	A uniform Hazardous Waste Manifest D006, D008, D018, D027, D039, and D040 waste; used oil container not marked	Ref. 28, pp. 1, 3-5, 8, 10
Speedway Volkswagen	Site Remediation Report	December 27, 2000	Soil and Ground Water	Total Petroleum Hydrocarbon	Approximately 180 tons of impacted soil was removed and transported to a special waste landfill.	Ref. 16, pp, 1, 3, 4
Warehouse Property	Site Investigation Report	September 20, 2007	Soil and Ground Water	PCE TCE	PCE and TCE were detected in soils and ground water	Ref. 41, pp.18, 22
Chemtura Corporation	Revised Remedial Work Plan	October 31, 2013	Soil and Water	TCE, Cis-1,2 DCE, PCE, VC	Ground Water VOC contamination has been confirmed in on-site soils and ground water. The facility has been terminated from IDEM's Voluntary Remediation Program	Ref. 25, pp. 1, 38, 114-117
Dollar General Property/B&B Liquors	Phase I Environmental Site Assessment	March 11, 2015	None	No samples were obtained	The site operated as a drop off laundry from 1960 to 1972 and a gasoline filling station prior to 1960	Ref. 30, p. 11
Henely's Cabinets	Hazardous Waste Notification	April 20, 1994	None	F003, F005, D007, D008, D018, D035, D039, and D040 waste	Small Quantity Generator	Ref. 27, pp. 1, 5, 6, 9
CVS Pharmacy Property	Subsurface Soil, Ground water, and Vapor Intrusion Investigation Report,	December 2, 2014	Ground Water, Air	TCE, Cis-1,2-DCE	Sub-slab air samples revealed the presence of TCE above action levels	Ref. 67, pp. 1, 6,7, 8, 12, 13

Name	Investigation	Date	Samples	Substances	Comments	References
Industrial Laundry and Dry Cleaners, Inc.	Quarterly Monitoring Report	January 23, 2015	Ground Water	PCE,TCE, Cis-1,2 DCE, Trans, 1,2-DCE	TCE levels in ground water: as high as 2440 ppb in ground water; facility is currently being addressed by IDEM Enforcement	Ref. 76, pp. 1, 2, 39
Tranum Insulation Inc. (AKA: Former Stone Container)	Phase II Environmental Site Assessment	May 15, 2015	Ground Water	PCE, TCE	Levels of TCE and PCE were detected in the ground water on-site. However the contamination may be from an up-gradient source	Ref. 65, pp. 8, 11, 12
40 Minute Cleaners	Memorandum	July 9, 2015	Soils Ground Water	PCE	PCE was found at a concentration of 36.6 ug/l in the ground water and at a concentration of 0.0107 mg/kg in the soil	Ref. 77, pp. 1, 8, 10
Haldur, Inc, d.b.a. Penn 60 minute Cleaners	Preliminary Assessment	October 20, 2014	Ground Water	Cis-1,2 DCE PCE TCE	Levels of PCE in off-site ground water samples ranged from 9.6 parts per billion (ppb) to 2,400 ppb. Levels of TCE ranged from 1.0 ppb to 27 ppb.	Ref. 102, pp. 11, 17, 66

A more detailed history of the facilities and related investigations listed in the tables above is presented below.

Former Karstadt Reed Cleaners
1449 North Illinois Street
Indianapolis, Indiana

The facility consists of two (2) parcels encompassing approximately 0.3 acre of land. The property consists of a brick building that was historically utilized for dry cleaning operations and an asphalt parking area (Ref. 6, p. 2). Karstadt Brothers Dye Works operated at the property from 1920 to 1954 (Ref. 6, p. 2). Dry cleaning operations occurred from 1954 to 2007. The building is currently vacant (Ref. 6, p. 2). Tetrachloroethylene (PCE) has been identified in the on-property ground water (Ref. 6, p. 2, 4). The former dry cleaner is currently being addressed by IDEM's State Cleanup Program. The IDEM State Cleanup ID# is 0000298 (Ref. 6, p. 2).

Former Shuron
1402 N. Capitol Avenue
Indianapolis, Indiana

The facility is an approximately 2.32 acre lot with a four story building encompassing a total of approximately 60,000 square feet (Ref. 40, p. 5). The 1964, 1966, and 1969 Sanborn Maps indicate Shuron-Continental, a Division of Textron as the occupant (Ref. 40, p. 6). A review of Sanborn Maps and historical City Directory research reveal that the facility was utilized as an optical supplies manufacturer from 1928 to 1977(Ref. 40, p. 6). PCE concentrations have been detected in the on-site ground water (Ref. 7, pp. 10, 18). This former facility is

currently being addressed by IDEM's Voluntary Remediation Program (VRP). The IDEM ID# is 6070101 (Ref. 37, p. 1).

National Sandblasting
2276 Montcalm Street
Indianapolis, Indiana

According to Marion County Health Department inter-office communication memo in 1987, the area was leased by Marathon, Inc. which buys chemicals in bulk and repackages them for sale (Ref. 9, p. 1). The company had a wide variety of chemicals which were stored close together (Ref. 9, p. 1). On August 20, 1987, a health department representative responded to a first aid run at the facility (Ref. 9, p. 2). Apparently two workers had sandblasted the interior of two swimming pool filtrations tanks and then entered the tanks to apply a sealant to the interior surfaces. They had been overcome and one of the men was sent to the hospital (Ref. 9, p. 2). The sealant contained toluene and perchloroethylene (Ref. 9, p. 2). In 1988, a complaint was filed with the Marion County Health Department regarding the possibility of inadequate ventilation in a paint room (Ref. 87, p. 1).

Former Carrier Bryant
1100 W. 21st Street
Indianapolis, Indiana

The former Carrier/Bryant Manufacturing Corporation facility was historically utilized as a machine and tool manufacturing facility and a heating and air conditioning manufacturing and warehouse facility (Ref. 39, p. 7). Manufacturing operations included the operation of heavy equipment and cranes, paint operations, freon loading stations, and warehousing (Ref. 39, p. 7). In 1983, the facility ceased operations as a heating and air conditioning manufacturer and began operations as AAAA Warehousing Wholesale (Ref. 39, p. 7). By 2001, the property was vacated and an environmental assessment was performed on behalf of a bank (Ref. 10, p. 2; 38, p. 1).

The City of Indianapolis requested U.S. EPA assistance with abandoned hazardous substances, pollutants or contaminants at the Site. In November 2012, EPA began a time critical removal action at the Site including the performance of, or supervision of the performance by possibly responsible parties of: securing the site to prevent access and exposure, characterization of all hazardous wastes, removal transportation, and off-site disposal of hazardous substances, pollutants or contaminants (Ref. 10, p. 1).

In 2013 and 2014, Heartland Environmental Associates, Inc. conducted a Limited Phase II Environmental Site Assessment for the former facility (Ref. 39, p. 1, 5, 7). PCE concentrations as high as 24.6 ppb were detected in on-site monitoring wells (Ref. 39, p. 12). PCE concentrations were found in soils as high as 80.1 ppb in soils (Ref. 39, p. 11). Currently, IDEM's Brownfield Program is addressing environmental issues at this site.

Lincoln Technical Institute
1201 Stadium Drive
Indianapolis, Indiana

The facility that was located at this address maintained a Conditionally Exempt Small Quantity Generator of hazardous waste status (Ref. 11, p. 1). According to a Notification of Hazardous Waste Activity form, the facility generated F002 and F004 waste (Ref 11, p. 8). Lincoln Technical Institute offers hands-on career training programs for a variety of fields including automotive, health sciences, business and information technology, skilled trades, spa and cosmetology and culinary (Ref. 49, p. 10). The property is now occupied by the Tyler, an apartment complex utilized by Indiana University/Purdue University (IUPUI) students (Ref. 48, p. 1, 2).

Component Machines
1613 Gent Avenue
Indianapolis, Indiana

The facility currently rebuilds automobile motors and has been in operation for over 50 years (Refs. 18, p. 1; 42, p. 8). The Component Machine site is currently owned by Thomas W. Sr. and Donna Crowe, and is operated as Component Machine, Inc (Ref. 18, p. 1). Historical wastewater management at the site included the usage of an

oil/water separator and grit settling basin consisting of a concrete vault. The vault received wash waters and cleaning solutions which were used to clean engine parts. Some solutions contained PCE and TCE which seeped through the concrete vault into soil and ground water. Both PCE and TCE are considered constituents of concern (COCs) at this facility (Ref. 45, p. 2). Concentrations of PCE and TCE have been detected in on and off site monitoring wells (Ref. 12, p. 3). The soil and ground water have been impacted by TCE and PCE (Ref. 12, p.1; 44, p. 4). The facility is currently being addressed by the IDEM's State Cleanup Program.

Goodwill Industries of Central Indiana, Inc.
1635 W. Michigan Street
Indianapolis, Indiana

The facility was a Conditionally Exempt Small Quantity Generator (Ref 13, p. 1). According to an EPA Notification of Hazardous Waste Activity form, the facility generated F001, F002, F003, F005, and D001 Waste (Ref. 13, p. 16). The RCRA identification number for this facility is IND006938278 (Ref. 58. p. 1). A Phase II Limited Subsurface Investigation was conducted at the Goodwill property (Ref. 47, p.1). Tetrachloroethene was detected in a soil boring (Ref. 47, p. 34). Concentrations of tetrachloroethene, trichloroethene, and vinyl chloride were detected in on-property ground water samples (Ref. 47, p. 35).

Forty-Five Minutes Cleaners
960 Indiana Avenue
Indianapolis, Indiana

Forty-Five Minutes Cleaners was a former dry cleaning operation. According to a letter from the Marion County Health Department, observed defects and suggested corrections were issued to the facility (Ref. 14, p. 1). During a site visit in June 2013, IDEM staff observed two flush mount monitoring wells at the facility (Ref. 74, p. 1). A search of IDEM and Marion County records revealed no information regarding any releases of hazardous materials to the ground water pathway. According to the U.S. EPA FRS Detail Report, the facility is listed as a Conditionally Exempt Small Quantity Generator. The RCRA identification number for this facility is INR000007419 (Ref. 57, p.1). The on-site building is currently vacant (Ref. 74, p. 1).

Printing Partners, Inc.
929 W. 16th Street
Indianapolis, Indiana

The facility is a print shop. Its core business is sheet-fed commercial printing. This includes design and prepress services, conventional offset printing, direct imaging printing, black/white and color digital printing, variable printing, finishing (die cutting, foil stamping and embossing), mailing and fulfillment, promotional products, publishing, and signage(Ref. 53, p.1). The facility is a Small Quantity Generator (SQG) (Ref. 15, p. 2). According to a U.S.EPA RCRA Subtitle C Site Identification Form, the facility generated D001, D002, D011, D018, and D039 type hazardous wastes (Ref. 15, p. 3). No other information can be found regarding any releases from the facility.

Flexdar
1825 W. 18th Street
Indianapolis, Indiana

This former facility consists of an irregular shaped property, of approximately 0.9 acres, with one single-story building which encompasses approximately 75% of the total footprint of the site (Ref. 52, p. 14). Historical documents indicate DuPont and Flexdar, Inc. have been the only tenants of the property since 1955 (Ref. 52, p. 14). DuPont occupied the property from 1955 until 1991, and reportedly used the site building as a paint warehouse and automotive parts distribution center (Ref. 52, p. 14). The former Flexdar facility became the tenant at the site in either late 1994 or early 1995, and reportedly used TCE and nitric acid in its operations as a rubber stamp and printing plate manufacturer (Ref. 52, p. 14). The site is located within the Riverside Well Field Wellhead Protection Area (WHPA) (Ref. 52, p. 14; 60, pp. 2, 119; Figure 1-3).

In April 2011, a source area investigation to characterize the nature and extent of chlorinated solvents in subsurface soil and establish source area boundaries for remedial activities (Ref. 52, p.17) Subsurface

investigations indicate soil and ground water beneath and near the facility have been impacted with TCE and its breakdown products, and petroleum hydrocarbons (Ref. 52, p. 31). TCE was found at concentrations as high as 145,000 ug/L in ground water (Ref. 52, p. 45). The source of TCE impact to the site appears to have been due to a surface release of TCE within the site building which may have entered the south sewer line (Ref. 52, p. 26).

McBroom Electric
800 W. 16th Street
Indianapolis, Indiana

McBroom Industrial Services repairs servo motors, spindles, AC/DC motors, provides machining services, is a distributor and is an authorized repair center for various facilities including US Motors, ABB, Baldor, Fanuc, Leeson, etc. (Ref. 54, pp. 1, 2, 4, 7, 10, 13). According to EPA Notification of Regulated Waste Activity form, the facility is a Conditionally Exempt Small Quantity Generator and handles D001 waste (Ref. 32, p. 1, 2).

Brownfield Redevelopment Corridor
Martin Luther King Jr. and 16th Street
Indianapolis, Indiana

In June 1996, The City of Indianapolis announced plans for a major economic development project along MLK Corridor on the city's near west side (Ref. 66, p. 3). The redevelopment project at MLK and 16th Street involves four parcels of land: the Parker Property-north, the former Star Service Station, Universal Sign and Parker Property-south (Ref. 66, p. 3).

TCE concentrations (as high as 1,100 ppb) were detected in ground water samples obtained from the Parker Property-south (Ref. 66, p. 8). Concentrations of 1,1,1-trichloroethane (1,1,1 TCA), and cis-1,2-DCE were also detected in on-property ground water samples.

Kash Dry N Cleaner
AKA Jim's Cleaners
AKA Plainfield Cleaners
2605 W. 16th Street
Indianapolis, Indiana

The facility is a commercial dry cleaner operating one (1) dry to dry machine (Ref. 22, p. 6). Records show it was established in 2011 and incorporated in Indiana (Ref. 55, p. 2). The primary waste stream generated is a F002 waste of lint and filters (Ref. 22, p. 6). The facility is a Conditionally Exempt Small Quantity Generator of hazardous waste (Ref. 22, p. 6). No information exists if a release of hazardous substances had occurred to the ground water pathway from this facility.

Dickey & Son Machine and Tool Company
2450 Turner Avenue
Indianapolis, Indiana

The property was used as a service yard, and locomotive and rail car repair, and fueling station from the 1890s when it was part of the Moorefield Yard (Ref. 23, p. 5). The repair and refueling activities were discontinued in the 1970s (Ref. 23, p. 5). The service yard activities were discontinued in the 1990s. Dickey & Sons operated at the site from 1998 to 2007 as a machine and tool shop (Ref. 23, p. 5).

A phased comprehensive site investigation was conducted in early 2009 which included the installation of ground water wells (Ref. 23, p. 5). Elevated levels of VOCs were found on the east side of the property in MW-3 (Ref. 23, p. 6). At this monitoring well, cis-1,2-dichloroethene (184 ug/l) and trichloroethylene (364 ug/l) were detected (Ref. 23, p. 6).

America One Hour Cleaners
AKA Morley's Cleaners
1910 Lafayette Road / 1901 Belleview Place
Indianapolis, Indiana

According to an EPA Notification of Regulated Waste Activity Form, F002 waste was generated at this facility during the time it was known as Morley's Cleaners. The EPA ID number for this facility is IND984898528 (Ref. 24, p. 3). No other information is known regarding this facility at this time. No information is present regarding these monitoring wells. A reconnaissance site visit and an internet search was conducted IDEM staff at the site. As a result, IDEM staff confirmed the 1910 Lafayette Road address and 1901 Belleview Place address is the same property (Ref. 104, p.1).

Johnson Controls, Inc.
1225 N. Senate Avenue
Indianapolis, Indiana

Johnson Controls is a provider of equipment, controls and services for heating, ventilation, air-conditioning, refrigeration and security systems (Ref. 56, p. 1). According to an EPA Notification of Regulated Waste Activity Form, F002 waste was generated at this facility (Ref. 26, p. 9). According to the U.S. EPA FRS Detail Report, the facility is listed as a Conditionally Exempt Small Quantity Generator (Ref. 59, p. 1). The RCRA ID number for this facility is IND984976381 (Ref. 59, p. 1).

Peerless Pump
AKA: Sterling Fluid Systems (Ref. 88, p. 1; 98, p. 1)
2005 Dr. Martin Luther King
Indianapolis, Indiana

The facility machines and assembles fluid pumps for large volume wells and industry. Machine cutting oils and coolants are generated from the machining processes (Ref. 28, p. 3). In addition, parts washer solvent is generated from equipment maintenance and repair operations (Ref. 28, p. 3).

According to a State of Illinois Uniform Hazardous Waste Manifest, D006, D008, D018, D027, D039, and D040 waste is generated at this facility (Ref. 28, p. 10). According to an Industrial Hazardous Waste Inspection Report, a violation was cited for a release of used oil occurring adjacent to the exterior used oil accumulation tank (Ref. 28, p. 8). The facility at this address is currently Peerless Pump (Ref. 88, p. 1).

Bodycote Thermal Processing
AKA: Industrial Heat Treating and Metallurgical Co. (Refs. 89, p. 1; 90. p.1; 99, p. 1; 100, p. 1, 103, p. 1)
2131 Dr. Martin Luther King Jr./500 West 21st. (Refs. 89, p. 1; 90. p. 1; 99, p. 1; 100, p. 1)
Indianapolis, Indiana

The facility heat treats metal parts for the automotive, aircraft, and aerospace industries (Ref. 29, p. 2). As part of the heat treating process, parts are cooled in baths containing mixtures of water and quench oil (Ref. 29, p. 2). The parts may also be treated in a salt bath. Sludges from these baths are handled as hazardous Waste (D002) (Ref. 29, p. 2).

Two vapor degreasing units which use trichloroethylene are present at the facility (Ref. 29, p. 2). Waste trichloroethylene from this unit is recycled on site in a still (Ref. 29, p. 2). The facility has indoor bulk storage areas for trichloroethylene product, quench oil product, and waste quench oil (Ref. 29, p. 2).

The RCRA identification number for this facility is IND006417315 (Ref. 99, p. 1). Note that according to the map provided by the EPA FRS Detail Report and an internet search map for 2131 Dr. Martin Luther King Jr., Indianapolis, Indiana, the properties are located at the same location (Ref. 89, p. 3; 90, p.1).

Former Stewart Manufacturing
1280 N. Senate Avenue
Indianapolis, Indiana

Stewart Manufacturing operated between 1987 and 2004 as an industrial manufacturing facility which performed metal stamping, degreasing, painting, drying, and assembly operations (Ref. 51, pp. 12, 20). During these activities, chemicals used at the site included coolants and lubricants for machinery maintenance, solvent degreasers for parts cleaning, and paint and coatings utilized during spray paint finishing (Ref. 51, pp. 12, 20). The site is currently being operated by Waymire Distribution, Inc., a division of Waymire (Ref. 51, p. 12, 20).

A Phase III investigation was conducted (Ref. 51, p. 1). Ground water samples collected contained PCE and TCE concentrations above their respective IDEM Risk Integrated System of Closure (RISC) residential default levels of 5 ug/L (Ref. 51. p. 38). TCE concentrations ranged from 51 to 6,600 ug/L, and PCE concentrations varied between 210 to 440 ug/L (Ref. 51. p. 38). The property is located within a Marion County Wellhead Protection Area (WHPA) (Ref. 51, p. 26).

In January 2005, VOC impacted soils were removed from the site. About 525 tons of impacted soils were removed from under the building from the old drain and supply lines. In addition, approximately 450 tons of impacted soil was removed from an outside degreaser storage area (Ref. 60, p. 283).

The property is located within a Marion County Wellhead Protection Area (WHPA) (Ref. 51, p. 26). The former facility is currently being addressed by IDEM's Voluntary Remediation Program (VRP) (Ref. 43, p. 1). The VRP ID number is 6040306 (Ref. 43, p. 1).

Former Fame Laundry/Michaelis Development
1352 N. Illinois Street
Indianapolis, Indiana

The site consists of a rectangular shaped property (approximately 0.9 acres) with two buildings (Ref. 50, p. 3). The main building, situated on the northern half of the property, consists of a 68,000 square foot, three story brick building on a concrete slab (Ref. 50, p. 3). This building was formerly used as a commercial laundry and dry cleaner operated by Fame Laundry between 1940s and the 1960s (Ref. 50, p. 3). The second building, situated on the southern half of the property, is a 6,700 square foot single-story brick building on a concrete slab that is reported to have previously been used as a garage for the laundry delivery vehicles (Ref. 50, p. 3).

An initial investigation of the site was completed in 2002 (Ref. 50, p. 4). Results from this investigation indicated the presence of PCE in both soil and ground water at concentrations exceeding IDEM's RISC Industrial Default Closure Levels (IDCLs) (Ref. 50, p. 4). PCE concentrations in the ground water obtained from an on-property monitoring well, was found to be 190 ug/L (Ref. 33, p. 1, 13). In order to mitigate source zone soil and prevent further migration of contaminants to ground water, a remedial strategy to treat vadose zone soil at site was designed (Ref. 50, p. 5). Pilot test of a soil vapor extraction system (SVE) was performed at the site in June 2006 (Ref. 50, p. 5). As of April 14, 2009, 95.61 lbs. of PCE were removed from vadose zone soil (Ref. 50, p. 10). The facility is currently being addressed by IDEM's Voluntary Remediation Program (Ref. 86, p. 1). The VRP ID number is VRP# 6090502 (Ref. 86, p. 1).

Speedway Volkswagen
1930 W. 16th Street
Indianapolis, Indiana

The site is currently an auto sales/service facility (Ref. 16, p. 3). Approximately 180 tons of impacted soil was removed and transported to a special waste landfill (Ref. 16, p. 3). This release was reported to IDEM on November 30, 2000 (Ref. 16, p. 3). On December 4, 2000, the excavation was completed (Ref. 16, p. 4). The consultant, Capital Environmental Enterprises, Inc. recommended that no further assessment was necessary at this site with respect to the release (Ref. 16, p. 11).

Warehouse Property
1701 N. Gent Street
Indianapolis, Indiana

A Site Investigation Report was submitted to IDEM in September 2007 (Ref. 41, p. 1). The site investigation was conducted to further assess the possible presence of one or more source areas containing COCs up-gradient of the Component Machine property (Ref. 41, p. 5, 17). The property has been used for industrial and commercial purposes for several decades (Ref. 41, p. 14). The site is located adjacent to the Component Machines facility (Ref. 41, p. 15). PCE and TCE were detected in ground water on the south east side of the property (Ref. 41, pp. 23, 24). Conditions beneath the site building have contributed to concentrations of COCs, most notably PCE and TCE to areas south of the site building (Ref. 41, p. 24). This includes the Component Machines property (Ref. 41, p. 24).

Chemtura Corporation
AKA: Connor Corporation
3500 E. 20th Street
Indianapolis, Indiana

The facility property is approximately 37 acres in size. The property was first developed in the early 1900s and was used to manufacture bedsprings. In 1920, the property was purchased by Premier Motor Company and used to manufacture automobiles. Since the early 1930s until 2001, the facility was owned by Rubtex Products, then Richardson Battery, Witco Corporation, Crompton Corporation, Ruby Park LLC, Crusader Servicing Corporation, and Connor Corporation (Chemtura), and was used to manufacture lead-acid battery containers (Ref. 25, p. 17).

The battery container operation at the Site included the manufacturing of polypropylene battery containers and lead battery terminal posts. Manufacturing and lead processing operations were conducted in the northwestern quarter and the central portion of the (former) warehouse building and the southern half of the Elliott Williams building. The remainders of the buildings were used for offices, maintenance, or storage. Virgin polypropylene pellets made up the bulk of the materials used to manufacture the casings; however, a small percentage of polypropylene was obtained from crushed recycled battery casings. The lead battery terminal posts were cast from lead ingots (Ref. 25, p. 18).

Investigation activities at the Site to date include completing approximately 150 soil borings, 57 test/observation pits, and 33 trenches. Over three hundred soil samples and have been collected for analysis at offsite laboratories. Thirty-two permanent monitoring wells, designated as MW-1 through MW-32, have been installed throughout the Site, including downgradient offsite locations (Ref. 25, p. 37).

Contaminants of concern (COCs) in ground water include cis-1,2-dichloroethene, TCE, PCE, vinyl chloride (VC), and lead. However, historically methylene chloride, 1,1-dichloroethene (1,1-DCE), methyl ethyl ketone (MEK), benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, and arsenic have been detected at the facility (Ref. 25, p. 38).

The facility was accepted into IDEM's Voluntary Remediation Program (VRP), however since the responsible party did not fully participate in the VRP's request, the facility acceptance in the VRP was terminated (Ref. 21, p. 1).

Dollar General Property/B&B Liquors
2131-2135, 2163 N. Central Avenue
Indianapolis, Indiana

A Phase I Environmental Site Assessment was conducted for the facility at 2131-2135 North Central Avenue (Ref. 46, p. 1). The property currently consists of a commercial retail store and warehouse storage building with associated asphalt parking lot (Ref. 46, p. 14). A review of historic Sanborn Maps indicated a former gasoline service station was present north and adjoining the property addressed at 2163 North Central Avenue (Ref. 46, p. 17). According to historic site documentation, Sanborn Maps and city directories reviewed, a gasoline filling station operated on the property immediately adjoining the site to the north/northwest. This property operated as

a gasoline filling station from at least 1925 through 1960. The gasoline filling station operated at least three underground storage tanks (USTs), located on the southeast corner of the property adjacent to the site (Ref. 46, p. 5). The Phase I did not include sampling or analysis of environmental media for the 21-31 North Central property (Ref. 46, p. 8).

A Phase I Environmental Site Assessment was conducted for the property located 2163 North Central Avenue (Ref. 30. p. 1). The site has been utilized as a commercial liquor store. The site has operated as a liquor store since 1972. Prior to operation as a liquor store the site operated as a drop off laundry from 1960 to 1972. The site operated as a gasoline filling station, operating under varying entities from 1925 to 1960 (Ref. 30. p. 11). The Phase I Environmental Site Assessment did not include the sampling or analysis of environmental media (Ref. 30, p. 8).

CVS Pharmacy Property
3425 W. 16th Street
Indianapolis, Indiana

The project site consists of a commercial building of approximately 10,852 square feet situated on approximately 1.09 acres. The remainder of the project site is parking lots, drives, and landscaped areas (Ref. 67, p. 3). In 2014, a subsurface soil, ground water, and vapor intrusion investigation was conducted (Ref. 67, p. 1, 3, 4). Concentrations of 1-methylnaphthalene, 2-methylnaphthalene, naphthalene, and 1, 2, 4 - trimethylbenzene were detected in subsurface soil samples. The analytical results of ground water samples showed the presence of TCE as high as 86.8 ug/l and cis-1,2- DCE at 9.34 ug/l (Ref. 67, pp. 8, 12). TCE, PCE, and benzene were detected in indoor air samples (Ref. 67, pp. 8, 13).

Former Industrial Laundry
Terrecorp, Inc.
2121 Hillside
Indianapolis, Indiana

The property consists of 5.49 acres and a large 41,000 square foot industrial building situated in an industrial and commercial area on the near north side of Indianapolis. The former Industrial Laundry ceased all operations in July 2002 and the property was vacant until December 2010 when it was sold to Terrecorp, Inc. Terrecorp, Inc. is a manufacturer of machined components and future land use is restricted to commercial or industrial use via an ERC (Ref. 75, p. 1).

According to a Notice of Inadequacy, TCE levels in ground water were found to be as high as 1,380 ppb in ground water in an off-site well, MW-15S (Ref. 78, p. 4). The facility is currently being addressed by IDEM's Enforcement Program.

Tranum Insulation Inc.
1123 W. 21st Street
Indianapolis, Indiana

According to information obtained for the Marion County, Center Township Assessor's Office on February 3, 2015, the current owner of the property is Tranum Insulation, Inc. The site is currently occupied by Midwest Exterior Services and Marion County Center Township records classify the site as a commercial warehouse. Previously it was used for container manufacturing (stone, packing materials, plywood), millwork, peanut and soybean processing, among other uses (Ref. 65, p. 8).

A phase II ESA Report was completed on May 15, 2015 (Ref. 65, p. 1). According to the report, concentrations of PCE and TCE (16.6 ug/l and 18.2 ug/l respectively) were detected in the ground water from established on-property monitoring wells (Ref. 65, p. 18). Regional flow for the unconsolidated aquifer is to the south (Ref. 65, p. 11).

40 Minute Cleaners
3360 N. Illinois Street
Indianapolis, Indiana

On July 9, 2015, Enviroforensics submitted a written spill report to IDEM, Emergency Response Section for 40 Minute Cleaners. The site is an active dry cleaner. PCE is no longer used in the dry cleaning process. The current operator began using a "green" solution in the operations in 2014 and discontinued use of the former PCE dry cleaning machine (Ref. 77, p. 1, 2).

Two (2) direct push borings were advanced on the interior of the facility building. DP-1 was adjacent to the former dry cleaning machine location in the east central portion of the building. DP-2 was advanced within the auto repair garage on the west side of the building. Ground water was encountered at approximately 24 feet below ground surface. PCE was detected in the on-site ground water and soil (Ref. 77, p. 1). PCE was found at a concentration of 36.6 ug/L in the ground water and at a concentration of 0.0107 mg/kg in the soil (Ref. 77, pp. 8, 10). The nature and extent of the contamination are unknown at this time. Further investigation is needed (Ref. 77, p. 1).

Henley's Cabinet
1310 North Capitol
Indianapolis, Indiana

Little information is known for Henley's Cabinets. According to a Notification of Regulated Waste Activity form, the following wastes were generated: D001, F003, F005, D007, D008, D018, D035, D039 and D040 (Ref. 27, p. 6, 12). The facility is a Small Quantity Generator (Ref. 27, p. 9).

Haldur, Inc. d.b.a
Penn 60 Minute Cleaners
2175/2179 N. Pennsylvania (Ref. 102, p. 1, 16)
Indianapolis, Indiana

A Preliminary Assessment was conducted by IDEM in 2013 (Ref. 102, p. 11, 15, 17). Investigations conducted through IDEM's Brownfields program at 2131 – 2151 N. Meridian Street, Indianapolis, and documented in the report *Additional Subsurface Investigation Report* indicated off-site volatile organic compound (VOC) ground water contamination, including cis-1,2, dichloroethene (1,2 – DCE), chloroform, methyl tertiary-butyl ether (MTBE), toluene, tetrachloroethylene (PCE), and trichloroethylene (TCE)). Levels of PCE ranged from 9.6 parts per billion (ppb) to 2,400 ppb. Levels of TCE ranged from 1.0 ppb to 27 ppb. The report concluded that the source of the contamination was likely from an off-site, up-gradient location (Ref. 102, pp.17, 62, 64-66).