Permanent Household Hazardous Waste Collection Facility Feasibility Study

ECOLOGY ACTION CENTER

Stage 1 Evaluation
April 2024

APTIM

TABLE OF CONTENTS

SECTION **PAGE**

SECTION 1. INTRODUCTION

1.1 Purpose

This report summarizes research on alternative methods to collect household hazardous waste (HHW), including one-day collection events, permanent HHW collection facilities, satellite collection facilities and curbside collection. The information presented in this report represents Stage 1 of an overall feasibility analysis commissioned by the Ecology Action Center (EAC).

Stage 1 consists of a needs analysis, including analysis of HHW quantities, performance metrics for alternative service delivery methods, and preliminary cost information. The objective of Stage 1 is to provide EAC with a high-level analysis of potential future HHW management options, and to serve as the basis for continuing with more detailed analyses in Stage 2.

The Stage 1 report includes the following sections:

- Case studies for the five current permanent HHW facilities in Illinois, including history (i.e., how long the facilities have been operating), quantities of material collected, costs to operate facilities, and other service parameters such as number of participants (Section 2).
- Cost and HHW quantity information for one-day collection events to compile similar benchmark information on this method of service delivery (Section 3).
- HHW quantity information for “satellite-collection”, using the Solid Waste Agency of Lake County (SWALCO) as a primary example of this method of service delivery (Section 4).
- Cost and quantity information for curbside collection of HHW (Section 5). This is an emerging method of HHW collection in Illinois, and quantity and cost information are therefore more limited.
- Predictive model of HHW Quantities for McLean County (Section 6).
- Summary findings of the Stage 1 evaluation (Section 7).

Assuming EAC decides to move forward with more detailed evaluations for a permanent HHW facility, Stage 2 of the feasibility study will include a regulatory analysis, site location analysis, development of a conceptual design, detailed cost evaluation, and a staffing analysis for a permanent HHW facility in McLean County.

1.2 Definitions

Within this Stage 1 analysis, a number of terms are used and it is helpful to define those terms up front. “Household hazardous waste” (HHW) consists of household products that can catch fire, react, or explode under certain circumstances, or that are corrosive or toxic. Household hazardous waste is generated by residential sources (i.e., households) as opposed to commercial, institutional, agricultural, or industrial sources. From a regulatory standpoint, HHW is not a “hazardous waste” under the federal Resource Conservation and Recovery Act (RCRA) due to the “household” exclusion contained in RCRA. However, HHW materials may have

characteristics (i.e., ignitability, reactivity, corrosivity or toxicity) that could otherwise cause them to be deemed “hazardous” if they were generated by commercial or industrial sources.

The types of materials included in HHW has changed somewhat over time. As recently as five years ago, some HHW programs collected alkaline batteries and latex paint as HHW materials. However, because those materials are no longer considered to pose the same level of threat to health, safety and the environment as other HHW materials, and because of the higher cost of managing HHW materials, most HHW programs no longer accept alkaline batteries and latex patent and encourage residents to use alternative management methods (such as disposing of alkaline batteries with household trash or using paint take-back programs to recycle unused latex paint).

Another term used in this report is “participation rate”, which is best defined by way of example. Suppose a county with 20,000 residential households hosts a one-day HHW collection event which is restricted to county-residents only, and which is attended by 400 vehicles delivering HHW materials. The participation rate for that one-day event would be calculated as 2 percent (= 400 vehicles divided by 20,000 total residential households), meaning that 2 percent of the eligible households in the county participated in the collection event (assuming each vehicle represented one household). As a benchmark parameter of program performance, higher participation rates are preferable. The participation rate in some instances is adjusted upward to reflect that a participating vehicle may be delivering HHW materials from more than one household. The numerical value of this adjustment is usually determined by survey participants at the one-day event[1].

[1] Based on data compiled by the Ecology Action Center for one-day HHW collection events in McLean County during the period 1998-2021, each participating vehicle delivered HHW materials from 1.1 to 2.1 households.

1.3 Conversion Factors

Participants in HHW collection programs (whether one-day events or permanent HHW collection facilities) deliver HHW materials in a containerized form (e.g., a partially empty can of paint, a partially empty container of household cleaner, etc). When received at the HHW collection site, the materials continue to be handled as segregated types of HHW. This is done for safety reasons (e.g., no mixing of different chemical materials which could result in a dangerous reaction) and because the segregated HHW materials may be disposed of by different methods (e.g., incinerated for destruction, burned as an alternative fuel, recycled).

For many HHW materials, the incoming small household containers are "labpacked", meaning the partially empty containers are placed intact into a larger collection container -- often a 55-gallon drum although other size collection containers may be used. For a more limited number of HHW material types that can be readily identified as more homogeneous (e.g., antifreeze, used oil), the incoming household containers may be emptied into a larger container and subsequently transported and processed in a "bulked" manner.

Historically, most HHW collection programs have reported quantities of HHW collected on a volumetric basis: either gallons or 55-gallon drum equivalents (1 drum = 55 gallons). This is because scales are usually not available to weigh incoming HHW materials, and because contracts to dispose of the HHW materials have cost schedules specified on a volumetric basis. For instance, the Illinois Environmental Protection Agency's disposal agreement with Heritage Environmental Services (the Agency's disposal contractor for HHW materials), has fee schedules for different HHW materials on a volumetric basis.

Recently, however, some HHW programs have begun reporting HHW quantities on a weight basis (i.e., pounds). This is true for Illinois jurisdictions (including McLean County and Will County) that have self-funded[2] one-day HHW collection events. In addition, one of the permanent HHW collection facilities in Illinois (Solid Waste Agency of Lake County, or SWALCO) acquired scales in 2022 and since that time has begun tracking HHW quantities on both a volumetric (gallons) and a weight basis.

The conversion from volumetric data (gallons) to weight data (pounds) is not trivial and depends on the type of HHW material and whether it is labpacked or bulk-packed at the HHW collection facility. As part of this study, SWALCO provided measured weights and volumes (gallons) for different HHW materials (refer to **Appendix A**). On average, SWALCO calculated that one gallon of HHW weighs 4 pounds, although it can range from under 2 pounds to 10 pounds per gallon based on the specific type of HHW material.

In this Stage 1 report, HHW quantities for different jurisdiction are reported in the unit of measure (gallons or pounds) as reported by the jurisdiction. Unless otherwise noted, any conversion of quantities between volume (gallons) and weight (pounds) was calculated based on the measured SWALCO density of 4 pounds per gallon.

[2] "Self-funded" in this context means the jurisdiction did not receive IEPA funding for disposal of the HHW materials.

1.4 Baseline HHW Quantities

To provide additional context for the analysis of alternative HHW collection methods which follows, it is useful to start with estimates of how much HHW is generated by households. The U.S. Environmental Protection Agency (USEPA) estimates that residential households generate 20 pounds of HHW per year (although households can accumulate 100 pounds of HHW at a given time prior to doing a cleanout or moving to a new residence)[3].

Based on the most recent solid waste composition study performed for Illinois[4], approximately 23,800 tons of HHW are disposed by Illinois households on an annual basis. HHW materials represent approximately 0.5 percent of the total amount of residential waste disposed by those households. According to the latest Census counts (2020), there are 4,884,000 households in Illinois. These data indicate an annual HHW generation rate in Illinois of 9.7 pounds per household per year.

[3] U.S. EPA, Region 9, Household Hazardous Waste Factsheet.

[4] CDM Smith/Illinois Department of Commerce and Economic Opportunity/Illinois Recycling Association, *Illinois Commodity/Waste Generation and Characterization Study Update*, March 30, 2015.

SECTION 2. EVALUATION OF PERMANENT HHW COLLECTION FACILITIES

2.1 Illinois Facilities

There are currently 5 permanent collection facilities for residential HHW in the state of Illinois (refer to **Table 2-1**). Three of the facilities are located in the Chicago metro-area, one is located in the City of Rockford, and one is located east of the St. Louis metro-area (Madison County).

TABLE 2-1. PERMANENT HHW FACILITIES IN ILLINOIS

Facility	Location	Year Opened
City of Naperville	DuPage County	1992
City of Rockford/Four Rivers Sanitation Authority	Winnebago County	1995
Solid Waste Agency of Lake County (SWALCO)	Lake County	2002
City of Chicago Department of Public Health	Cook County	2005
Madison County Wood River Facility	Madison County	2021

Permanent collection facilities are regulated by the Illinois Environmental Protection Agency (IEPA) and must be issued development and operating permits by the Agency. However, local siting approval pursuant to the Illinois Environmental Protection Act (415 ILCS 5/39.2) is not required if the local government agrees to waive the local siting process[5]. Permitted facilities are only allowed to take residential HHW material (no material from businesses).

Each of the above facilities also operates under an intergovernmental agreement (IGA) with the IEPA. The IGA specifies additional operating requirements, including that only residential HHW material will be accepted (no material from businesses or institutions, for instance, unless agreed to by the Agency).

There are two important benefits to the IGA. First, the IEPA will accept "generator" responsibility for the HHW collected. This protects the local government owner of the HHW facility from CERCLA liability. Second, the IEPA pays for transport and final disposal of the collected HHW, reducing the cost to operate a permanent HHW facility.

Each of the facilities was contacted to obtain collection and cost data[6]. Brief case histories of each of the five Illinois sites are provided below.

2.2 City of Naperville

In 1992, the City of Naperville developed the first permanent site for HHW collection in Illinois. After years of operation, a new building was constructed to house the operation in 2015. The building is approximately 7,800 square feet in size and is located on a site of about 2.1 acres (refer to **Figure 2-1**). The building features a covered area for residents to drop-off of materials, as well as sorting, storage and office space (refer to **Figure 2-2**). The cost of the new facility was $1,185,000, which was substantially funded with a $900,000 grant from the Illinois Department of Commerce and Economic Opportunity.

[5] Local zoning approval would still be required, however.

[6] Madison County and Rockford did not provide information. IEPA provided disposal cost data for each of the five facilities that the Agency funds.

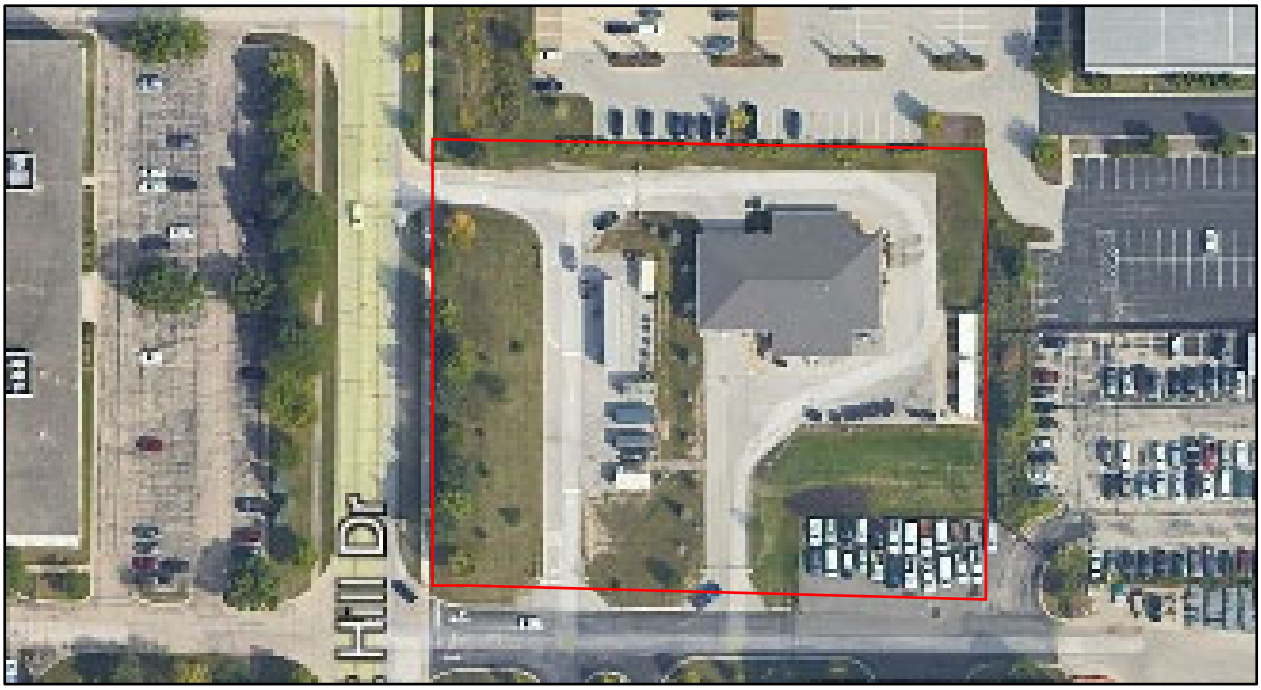

FIGURE 2-1. NAPERVILLE HHW FACILITY (AERIAL VIEW)

FIGURE 2-2. NAPERVILLE HHW FACILITY (STREET-LEVEL VIEW)

The facility is operated by the City's Department of Public Works with staffing provided by the Fire Department. The facility is open every Saturday and Sunday from 9:00 a.m. to 2:00 p.m. Pre-scheduled appointments are not required.

Historical HHW collection data for the Naperville facility are provided in **Table 2-2**. On average, the facility receives an average of 230 vehicles per operating day, but facility traffic can range from 30 vehicles per day on the low end to 540 vehicles per day on the high end.

TABLE 2-2. NAPERVILLE HHW FACILITY (COLLECTION QUANTITIES AND COSTS)					
Parameter	2018	2019	2020	2021	2022
HHW Collected (gallons)	78,425	69,905	66,105	69,980	46,910
HHW Collected (pounds)	784,250	699,050	661,050	699,800	469,100
# Vehicles (annual)	22,485	23,764	22,662	23,061	17,426
Gallons Per Vehicle	3.5	2.9	2.9	3.0	2.7
Pounds Per Vehicle	34.9	29.4	29.2	30.4	26.9
Facility Operating Cost	$277,945	N.A.	N.A.	N.A.	N.A.
Disposal Cost (paid by IEPA)	$323,754	$516,464	$405,112	$493,710	$460,081
Operating Cost/Vehicle	$12.36	N.A.	N.A.	N.A.	N.A.
Total Cost/Vehicle (with disposal)	$26.76	N.A.	N.A.	N.A.	N.A.
Operating Cost/Gallon	$3.54	N.A.	N.A.	N.A.	N.A.
Total Cost/Gallon (with disposal)	$7.67	N.A.	N.A.	N.A.	N.A.
Operating Cost/Pound	$0.35	N.A.	N.A.	N.A.	N.A.
Total Cost/Pound (with disposal)	$0.77	N.A.	N.A.	N.A.	N.A.

Sources:
1. City of Naperville: HHW collection amounts, # vehicles and operating cost. IEPA: disposal costs.

Notes:
1. Naperville uses a conversion factor of 1 gallon = 10 pounds, which may overestimate pounds of HHW collected (see discussion in **Section 1.3**).

There are several things to note about the historical annual deliveries of HHW to the Naperville facility:

- Operations at the facility during the second quarter of 2020 were curtailed due to the onset of the COVID-19 pandemic. As a result, 2020 quantities were likely lower than they might otherwise have been in the absence of the pandemic.

- During the second half of 2022, the facility temporarily ceased accepting certain types of HHW due to a fire at an Ohio facility used to dispose of the materials[7]. As a result, HHW quantities were noticeably lower in 2022 versus prior years.

- Because it is open every Saturday and Sunday throughout the year, annual vehicle counts at the Naperville facility are relatively high. While that indicates a higher level of participation (i.e., a favorable outcome), the average amount of HHW delivered by users (i.e., gallons per vehicle) is comparatively low, ranging from 2.7 to 3.5 gallons per vehicle.

- The City tracks HHW quantities in gallons and estimates pounds using a conversion factor of 10 pounds/gallon. Based on the discussion in **Section 1.3**, that conversion factor may be high and consequently the amount reported in pounds may be overestimated (and the benchmark cost “per pound” may be understated).

[7] The COVID-19 pandemic and the fire at the Ohio facility impacted all HHW collection activities in Illinois (permanent HHW facilities and one-day events) during the referenced time periods.

The City provided operating cost data for only one year (2018). Operating costs include labor, supplies, utilities, training and administration. In 2018, operating costs were budgeted at $277,945[8]. Disposal costs for that year were $323,754 and were paid for by the IEPA.

Naperville receives supplemental financial support for the permanent HHW facility under cost sharing agreements with four other units of local government: DuPage County ($100,000); Kane County ($10,000); Will County ($25,000); and the City of Aurora ($20,000)[9]. In 2018, total revenue under these cost sharing agreements amounted to $155,000. The City of Naperville paid the balance of facility operating costs, amounting to $122,945 (= $277,945 - $155,000).

The City of Naperville tracks the residency of users of its HHW facility, both by municipality and county. Historical data on the county of origin is provided in **Table 2-3**.

TABLE 2-3. NAPERVILLE HHW FACILITY (COUNTY OF ORIGIN)

Year	# Vehicles	DuPage (%)	Will (%)	Kane (%)	Other (%)
2015	17,586	60.4%	17.2%	14.7%	7.7%
2016	20,766	60.6%	17.8%	13.6%	7.9%
2017	21,414	61.0%	18.2%	13.2%	7.6%
2018	22,485	61.8%	17.7%	12.1%	8.5%
2019	23,764	60.1%	17.7%	12.5%	9.6%
2020	22,662	60.4%	17.3%	11.6%	10.7%
2021	23,061	60.3%	17.6%	10.8%	11.3%
2022	17,426	62.2%	16.4%	10.8%	10.6%
Average	21,146	60.9%	17.5%	12.4%	9.2%

Source:
1. City of Naperville records.

Utilization of the Naperville HHW facility has generally been consistent from year to year. DuPage County residents account for about 60 percent of users, with Will County and Kane County accounting for 18 percent and 12 percent of customers, respectively. Residents of the City of Naperville account for 40 percent of users (note that the corporate limits of the City fall partially in DuPage County and partially in Will County).

Estimates of participation rates at the Naperville HHW facility are summarized in **Table 2-4**.

[8] Operating costs do not include the amortized cost to construct the new building.

[9] Because the City receives disposal cost funding from the IEPA, the IEPA requires the Naperville facility to accept deliveries from households anywhere in Illinois. The cost sharing agreements with the four units of local government is intended to help defray operating costs at the Naperville facility.

TABLE 2-4. NAPERVILLE HHW FACILITY (ESTIMATED PARTICIPATION RATES)				
	City of Naperville	DuPage County	Will County	Kane County
# Vehicles (Average)	8,458	12,861	3,707	2,618
# Households	53,815	348,870	230,064	182.319
Participation Rate	15.7%	3.7%	1.6%	1.4%
Source: 1. Vehicle counts: City of Naperville records. 2. Number of households: U.S. Census, American Community Survey, 5-Year estimates, 2018-2022.				

The Naperville HHW facility is most utilized by residents of the City of Naperville, with an estimated participation rate of 15.7 percent[10]. The overall participation rate for DuPage County is about 3.7 percent, with lower participation for Will County (1.6 percent) and Kane County (1.4 percent).

Generally, participation drops off with distance from the HHW collection facility. This is illustrated in **Figure 2-3**, which shows cumulative participation at the Naperville facility versus distance (based on 2019 data). Approximately 54 percent of users lived within 10 miles of the facility, 81 percent of users lived with 20 miles of the facility, and 89 percent lived within 30 miles of the facility. The overall participation trendline is logarithmic, meaning that participation starts to flatten out after a distance of about 20 miles is reached.

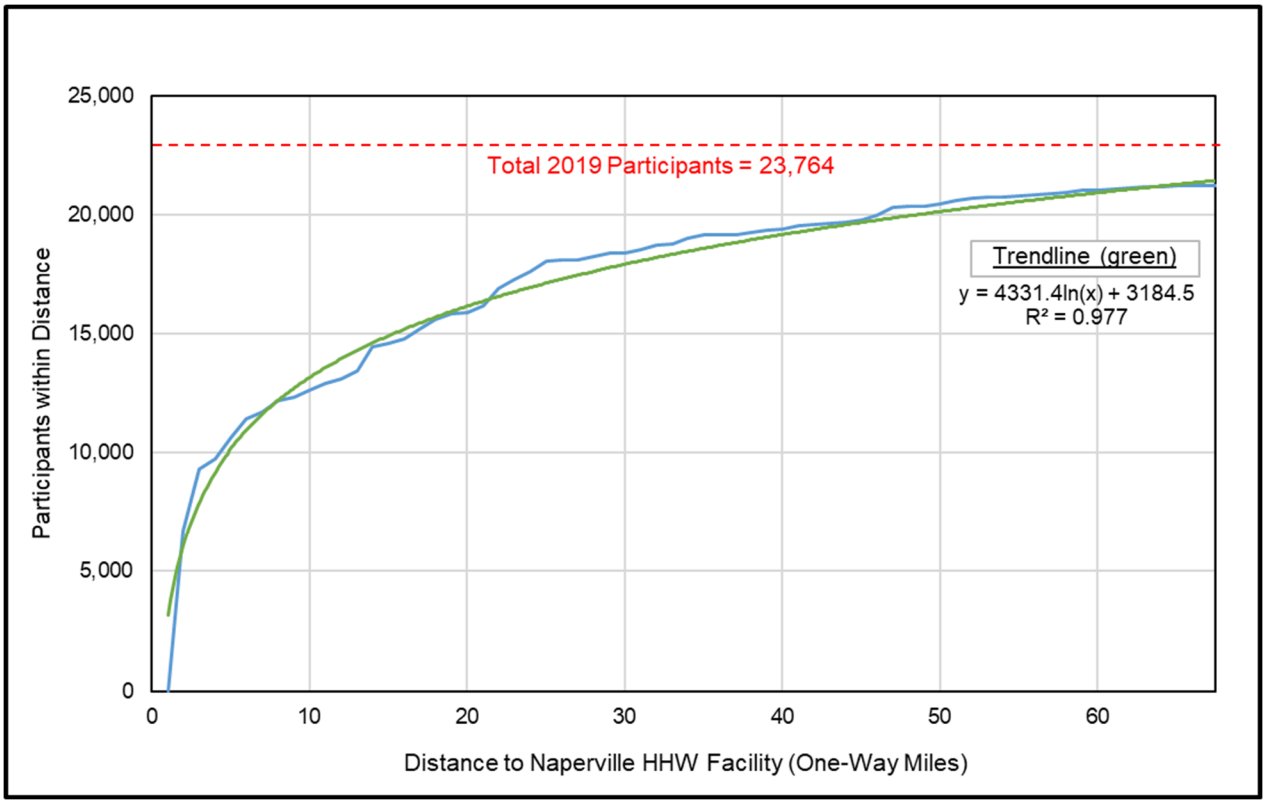

FIGURE 2.3. NAPERVILLE HHW FACILITY (PARTICIPATION VS. DISTANCE)

[10] Note that participation rates are estimated by dividing the number of vehicles from the jurisdiction by the number of households in the jurisdiction. If residents of Naperville use the HHW collection facility more than once per year, the participation rate would be somewhat overstated.

2.3 Solid Waste Agency of Lake County (SWALCO)

The Solid Waste Agency of Lake County (SWALCO) is a consortium of 43 municipalities in Lake County, Illinois. SWALCO developed its HHW facility in 2002. The building is approximately 7,200 square feet in size and is located on a site of approximately 1.3 acres in the Village of Gurnee (refer to **Figure 2-4**). In addition to serving as a permanent HHW collection facility, the building also houses the administrative offices of SWALCO (refer to **Figure 2-5**). The initial construction cost of the facility is estimated at $1,500,000.

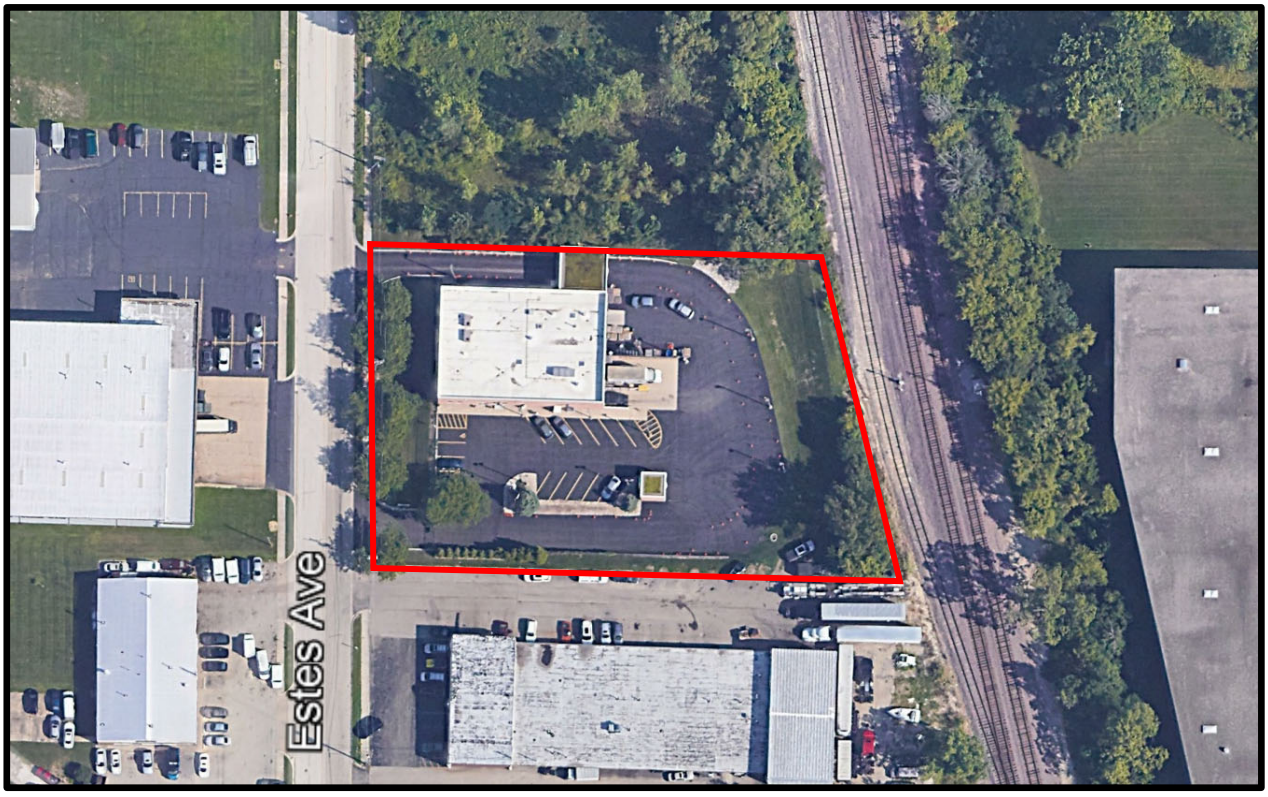

FIGURE 2-4. SWALCO HHW FACILITY (AERIAL VIEW)

The facility is operated by SWALCO staff and is open on two Saturdays per month (except December), for a total of 22 collection days per year. Operating hours are from 7:00 a.m. to 1:45 p.m. Pre-scheduled appointments are required; SWALCO requires appointments to manage traffic flow to the facility.

SWALCO also operates one-day satellite collection events at other locations in Lake County. Generally, SWALCO arranges the satellite collection events in member communities that are located 10 miles or more from the Gurnee site.

Historical HHW collection data for the SWALCO facility are provided in **Table 2-5**. On average, the facility receives an average of 246 vehicles per operating day, but facility traffic can range from 124 vehicles per day on the low end to 788 vehicles per day on the high end (the higher value is for a one-day satellite collection event).

FIGURE 2-5. SWALCO HHW FACILITY (STREET-LEVEL VIEW)

TABLE 2-5. SWALCO HHW FACILITY (COLLECTION QUANTITIES AND COSTS)					
Parameter	2018	2019	2020	2021	2022
HHW Collected (gallons)	87,164	96,503	53,400	78,612	50,522
HHW Collected (pounds)	348,656	386,012	213,598	314,446	202,088
# Vehicles (annual)	6,377	6,650	2,990	4,769	3,913
Gallons Per Vehicle	13.7	14.5	17.9	16.5	12.9
Pounds Per Vehicle	54.7	58.1	71.4	65.9	51.7
Facility Operating Cost	$288,350	$305,400	$342,100	$280,550	$264,850
Disposal Cost (paid by IEPA)	$190,017	$240,849	$161,349	$196,557	$227,776
Operating Cost/Vehicle	$45.22	$45.92	$114.41	$58.83	$67.68
Total Cost/Vehicle (with disposal)	$75.01	$82.14	$168.38	$100.04	$125.89
Operating Cost/Gallon	$3.31	$3.16	$6.41	$3.57	$5.24
Total Cost/Gallon (with disposal)	$5.49	$5.66	$9.43	$6.07	$9.75
Operating Cost/Pound	$0.83	$0.79	$1.60	$0.89	$1.31
Total Cost/Pound (with disposal)	$1.37	$1.42	$2.36	$1.52	$2.44

Sources:
1. SWALCO: HHW collection amounts, # vehicles and operating cost.
   IEPA (disposal costs).

As was the case for the Naperville facility, HHW collections at the SWALCO facility were lower in 2020 due to the onset of the COVID-19 pandemic, and lower in 2022 due to the fire at the Ohio facility that is used to dispose of several types of HHW.

There are some notable contrasts between the Naperville and SWALCO facilities:

- The SWALCO facility receives fewer annual vehicles than the Naperville site (about one-quarter to one-third of the traffic volumes at Naperville). This is because SWALCO operates two Saturdays per month (with appointments required), whereas Naperville operates every Saturday and Sunday (with no appointment necessary).

- Although the SWALCO facility receives less traffic, each vehicle brings more materials on average than at the Naperville site. SWALCO participants bring an average of 13 to 18 gallons per vehicle, compared to 3 to 3 ½ gallons per at the Naperville facility.

- The comparative success of the two facilities is therefore somewhat relative. The Naperville site receives greater participation (i.e., attendance, as measure by number of vehicles), but the SWALCO site has more "efficient" participation (i.e., larger deliveries of HHW by participants).

SWALCO was able to provide comprehensive financial data for a five-year period. In 2018, the operating cost (i.e., cost to receive HHW) was $3.31 per gallon, similar to the operating cost of $3.54 per gallon at the Naperville facility in that year. Total costs (operating and disposal) were $5.49 per gallon in 2018 versus $7.67 per gallon at the Naperville site[11].

SWALCO's operating costs have generally been stable, in the range of $3.15 - $3.50 per gallon. Total costs (including disposal) have also been stable, ranging from $5.50 - $6.00 per gallon. Costs for 2020 and 2022 were skewed upward due to the COVID-19 pandemic and the Ohio disposal facility fire. This is because some of SWALCO's costs are fixed in nature[12], and HHW deliveries in 2020 and 2022 were lower than usual.

SWALCO tracks the residency of users of its HHW facility but does not compile the results by county of origin. Historical participation rates at the SWALCO facility are shown in **Table 2-6**. Assuming that most users reside in Lake County, participation rates typically range from 2 to 2 ½ percent (participation in 2020 and 2022 was limited for the reasons noted previously). SWALCO's participation rate is somewhat lower than the DuPage County participation rate at the Naperville HHW facility (3.7 percent), likely due to the fact that the Naperville site is open more days.

TABLE 2-6. SWALCO HHW FACILITY (ESTIMATED PARTICIPATION RATES)

	2018	2019	2020	2021	2022
# Vehicles (Average)	6,377	6,650	2,990	4,769	3,913
# Households	254,794	254,794	254,794	254,794	254,794
Participation Rate	2.5%	2.6%	1.2%	1.9%	1.5%

Source:
1. Vehicle counts: SWALCO records.
2. Number of households: U.S. Census, American Community Survey, 5-Year estimates, 2018-2022.

[11] SWALCO staff indicated extra care is taken during the labpacking of incoming containers of HHW to maximize the amount of material placed in each labpack barrel. Further, the SWALCO facility has a tank for bulking of used oil. Such practices can lower the cost of disposal because the IEPA's disposal contractor is paid on a volumetric basis.

[12] SWALCO has a full-time employee to manage the HHW facility. Although this employee provides other duties, the employee's full cost is charged to annual operating costs for the HHW facility.

2.4 City of Chicago

The City of Chicago opened a permanent HHW collection facility in 2006. The facility is also used by the City to collect electronics waste. The overall building is approximately 24,000 square feet in size, of which half is used for HHW collection and half is used for e-waste collection (refer to **Figure 2-6**). The overall site is about 2.3 acres in size, which includes a City of Chicago fueling station along the frontage with the public street.

FIGURE 2-6. CHICAGO HHW FACILITY (AERIAL VIEW)

The building was formerly an animal incinerator that was converted to its present use for HHW and e-waste collection (refer to **Figure 2-7**). The renovation costs were estimated at $3,800,000[13]. The City received financial support of approximately $1,096,000 from the IEPA, Illinois Department of Commerce and Economic Opportunity, and the Illinois Clean Energy Fund to help pay for development costs.

The facility is managed by the City's Department of Public Health. The site operates on two days of the week: Tuesday from 7:00 a.m. to 12:00 p.m. and Thursday from 2:00 p.m. to 7:00 p.m. In addition, the facility is open the first Saturday of each month from 8:00 a.m. to 3:00 p.m. No appointment is required to drop-off materials.

[13] Patrick Engineering, Inc., *Peoria County - Household Hazardous Waste Facility Feasibility Study*, December 2009.

FIGURE 2-7. CHICAGO HHW FACILITY (STREET-LEVEL VIEW)
(HHW FACILITY BEHIND FUELING STATIONS)

Historical HHW collection data for the Chicago facility are provided in **Table 2-7**[14]. On average, the facility receives approximately 80 vehicles per operating day, which is lower than for the Naperville and SWALCO sites. Average HHW deliveries (in gallons) range from 3 to 6 gallons per vehicle, which is somewhat higher than the Naperville facility but lower than the SWALCO program.

TABLE 2-7. CHICAGO HHW FACILITY (COLLECTION QUANTITIES)

Parameter	2018	2019	2020	2021	2022
HHW Collected (gallons) – Note 1	31,951	34,095	31,005	47,140	41,860
HHW Collected (pounds)	127,802	136,381	124,021	188,561	167,438
# Vehicles (annual)	9,685	8,908	6,793	8,028	13,122
Gallons Per Vehicle	3.3	3.8	4.6	5.9	3.2
Pounds Per Vehicle	13.2	15.3	18.3	23.5	12.8
Disposal Cost (paid by IEPA)	$190,017	$240,849	$161,349	$196,557	$227,776

Sources:
1. City of Chicago: HHW collection amounts (pounds), # vehicles.
   IEPA (disposal costs).

Notes:
1. The City tracks HHW quantities by weight (pounds). HHW quantities in gallons were estimated based on conversion rate of 4 pounds per gallon.

[14] The City did not provide operating cost information.

Historical participation rates at the Chicago facility are shown in **Table 2-8**. Assuming that most users reside in the City of Chicago, participation rates range from 0.6 to 1.2 percent. While this is lower than participation rates for the Naperville and SWALCO facilities, it should be noted that the City of Chicago is geographically large and has approximately 3-4 times the number of households as DuPage County and Lake County. As was noted previously, participation tends to decline with distance from the HHW facility. If most of the users of the Chicago facility reside on the north side of the City, then participation rates at the Chicago HHW facility may be higher when compared to the number of north side households.

TABLE 2-8. CHICAGO HHW FACILITY (ESTIMATED PARTICIPATION RATES)

	2018	2019	2020	2021	2022
# Vehicles (Average)	9,685	8,908	6,793	8,028	13,122
# Households	1,129,908	1,129,908	1,129,908	1,129,908	1,129,908
Participation Rate	0.9%	0.8%	0.6%	0.7%	1.2%

Source:
1. Vehicle counts: City of Chicago records.
2. Number of households: U.S. Census, American Community Survey, 5-Year estimates, 2018-2022.

2.5 City of Rockford

The City of Rockford, in conjunction with the Four Rivers Sanitation Authority, opened a permanent HHW collection facility in 1995. The building is approximately 11,800 square feet in size and is located on a site of approximately 1.0 acres owned by the Authority (refer to **Figure 2-8**).

FIGURE 2-8. ROCKFORD HHW FACILITY (AERIAL VIEW)

The facility includes a canopied, drive-through area for residents to drop-off HHW materials (refer to **Figure 2-9**). The building is prefabricated and had an estimated cost of approximately $100,000 (in 1995)[15].

FIGURE 2-9. ROCKFORD HHW FACILITY (STREET-LEVEL VIEW)

The facility is open on Saturdays from 8:00 a.m. to 4:00 p.m. No appointment is required to drop-off materials. The City was not able to provide additional information on HHW quantities, vehicular traffic or costs in response to the request for information submitted as part of this Stage 1 analysis.

2.6 Madison County

The most recent permanent HHW collection facility in Illinois was developed by Madison County in 2021. The building is approximately 6,200 square feet in size and is located on a site of approximately 3.6 acres in the City of Wood River (refer to **Figure 2-10**). The site houses other buildings and uses (refer to **Figure 2-11**).

The facility operates on the first Saturday of each month and the third Friday of each month, from 8:00 a.m. to 12:45 p.m. An appointment is required to drop-off materials.

Madison County was not able to provide additional information on HHW quantities, vehicular traffic or costs in response to the request for information submitted as part of this Stage 1 analysis.

[15] Patrick Engineering, Inc., *Peoria County - Household Hazardous Waste Facility Feasibility Study*, December 2009.

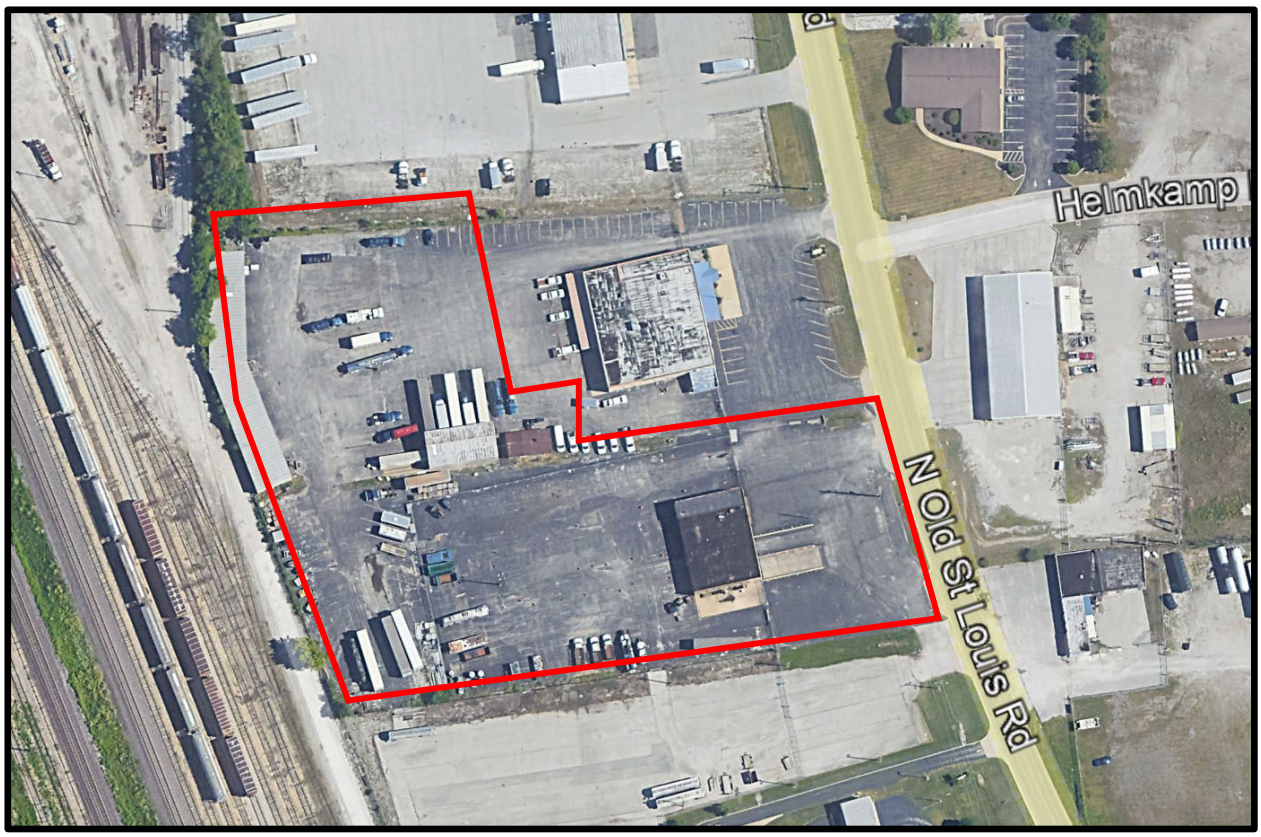

FIGURE 2-10. MADISON COUNTY HHW FACILITY (AERIAL VIEW)

FIGURE 2-11. MADISON COUNTY HHW FACILITY (STREET-LEVEL VIEW)

2.7 Champaign County (Proposed)

Champaign County has been investigating the development of a permanent HHW collection facility since 2015[16]. Most recently, this investigation has been advanced by Champaign County Environmental Stewards (CCES), which prepared a feasibility study in 2021[17].

In October, 2023, it was announced that CCES had purchased an approximately 4.78 acre vacant parcel (with water and sewer utility service) to house a future HHW collection facility[18]. The cost of the property, located in the City of Urbana, was $442,500[19]. CCES is budgeting $2,000,000 to $2,500,000 for capital costs including facility design, site improvements, building construction, and permitting. In addition, CCES is forecasting $173,000 in annual operating costs[20] and $275,000 in annual transportation and disposal costs (the latter to be funded through an intergovernmental agreement with IEPA).

CCES has raised initial funding of approximately $1,075,000 from three units of local government to help defray initial capital costs: Champaign County ($650,000), City of Urbana ($175,000) and City of Champaign ($250,000). Champaign County and the City of Urbana used funds from the federal American Rescue Plan Act for their contributions. The City of Champaign used money from its general operating fund to pay for its contribution.

CCES indicated a potential start date for construction in late 2024, with the facility opening in mid-to-late 2025.

The City of Bloomington is located approximately 54 miles (one-way) from the City of Urbana. As discussed in **Section 2.2** for the Naperville facility (refer to **Figure 2-3**), participation at permanent HHW facilities declines with distance from the facility. Thus, while a facility in Urbana may draw some users from McLean County, it is likely to be proportionately small. This is further evidenced by participation at McLean County one-day HHW collection events. For the 2021 event sponsored by the Ecology Action Center, over 91 percent of participants resided in McLean County and 1.7 percent were from Champaign County[21].

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16 Champaign County Regional Planning Commission, *Strategy for Improving Household Hazardous Waste Collection Options in East Central Illinois, Phase Three Report*, March 31, 2015.

17 CCES, *Feasibility Study: Household Hazardous Waste Collection Fixed Facility Serving Champaign County and Nearby Counties*, October 2021.

18 News-Gazette, *Plans Moving Ahead for Waste Collection Facility in North Urbana*, October 24, 2023.

19 Email communication, Susan Monte (CCES), November 6, 2023.

20 Ibid. CCES indicated that $173,000 in annual operating costs may be optimistic, a finding that is supported by the annual operating cost data for the Naperville and SWALCO facilities.

21 Ecology Action Center, *McLean County Household Hazardous Waste, 2021 Collection Event Report*, January 24, 2022.

2.8 Other States

Illinois appears to be comparatively underserved by HHW collection infrastructure. **Table 2-9** summarizes permanent HHW collection facilities in other Midwest states as well as the State of Washington. All of these states have a greater number of permanent HHW facilities, and all of the states have a smaller population than the State of Illinois.

TABLE 2-9. OTHER STATES (PERMANENT HHW COLLECTION FACILITIES

State	Population (2020)	# Permanent HHW Facilities	Notes on State Funding Support
Illinois	12,812,508	5	IEPA funds disposal costs.
Indiana	6,785,528	19	IDEM competitive grants (up to $100,000).
Iowa	3,190,369	28	IDNR partially funds disposal costs.
Missouri	6,154,913	32	MDNR grants to Solid Waste Districts.
Wisconsin	5,893,718	17	DATCP grant funding for Clean Sweep programs.
Washington	7,705,281	51	WDEC grant funding for solid waste planning.

Sources:
1. Indiana: analysis of Solid Waste Management District websites.
2. Iowa: analysis of Iowa Department of Natural Resources website and email communication.
3. Missouri: analysis of Missouri Department of Natural Resources website.
4. Wisconsin: analysis of Wisconsin Department of Agriculture, Trade and Consumer Protection data.
5. Washington: Department of Ecology, Solid Waste in Washington State, 24th Annual Status Report, December 2015.

Comparative collection data (e.g., pounds or gallons collected, number of participants, costs) were not readily available for these other states. However, select information was available as noted below:

- Iowa has a well-established statewide program for HHW collection. The state is served by 28 Regional Collection Centers (i.e., permanent sites). In addition, there are 43 satellite collection facilities (typically smaller collection operations) that deliver the collected HHW to one of the Regional Collection Centers. Further, 29 counties have mobile collection events. In 2023, approximately 4,228,719 pounds of HHW were collected in Iowa, which likely exceeds the amount of HHW collected in Illinois. The Iowa Department of Natural Resources (IDNR) provides establishment grants (up to $100,000 with a 50/50 local government match requirement above $25,000) to help fund start-up costs. In addition, (IDNR) provides annual funding to permanent sites to help defray the cost of disposal for HHW materials, amounting to approximately $890,000 in 2023[22].

- The Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) provides annual grant funding for local community Clean Sweep programs that collect HHW. In 2022, the amount of grants issued amounted to approximately $616,000. Grants require a 25 percent local government match. A total of 3,268,820 pounds of HHW were collected in 2022 from Clean Sweep grant communities; again, this total likely exceeds

[22] Note that IEPA pays for 100 percent of disposal costs for permanent HHW facilities in Illinois. IDNR provides partial financial support for Iowa facilities but does not cover 100 percent of disposal costs.

the amount of HHW collected in Illinois. Based on 62,318 participants, this corresponds to 52.5 pounds per participant[23].

- For many years, the Washington Department of Ecology (WDEC) published a comprehensive annual report on HHW collection activities in the state of Washington. The latest annual report was for 2014[24]. Although somewhat dated, the report provided useful benchmark data. In 2014, HHW collection programs in Washington recovered 12,899,000 pounds of HHW, which exceeds the amount of HHW collected in Illinois. Statewide, there were 199,585 participants in HHW collection programs in 2014[25]. Compared to 2,880,867 households, the participation rate was approximately 6.9 percent. The average household participant delivered 64.6 pounds of HHW to a collection facility (or one-day event), and the average cost per participant was $44.71, although both pounds per participant and cost per participant varied from community to community (refer to **Appendix B**).

- Funding in other states listed in **Table 2-9** (e.g., Indiana, Missouri, and Washington) is more sporadic. In Indiana, competitive grants are available from the Indiana Department of Environmental Management (IDEM), but those grants are available for waste diversion in general and not specifically allocated for HHW collection. The Missouri Department of Natural Resources provides grant funding to solid waste districts, but again those grants are not specifically dedicated to HHW collection and can be used by the districts for other waste-related purposes. The Washington Department of Ecology issues grants for solid waste planning, and therefore grant funds are available only to defray the cost of planning HHW collection programs.

Based on the foregoing, it appears that state funding support for HHW programs in Illinois is relatively generous compared to other states, given that IEPA pays for 100 percent of HHW disposal costs. Only Iowa and Wisconsin provide some level of regular financial support for HHW collection facilities and programs.

Despite this difference in state funding, all of the other states have a significantly larger number of permanent HHW collection facilities. This would indicate that residents of those states place a high value on having opportunities to manage HHW, as most of the facility and program costs are born by local jurisdictions.

Recently, the issue of additional permanent HHW collection sites in Illinois has received renewed attention. In 2015, a statewide task force on the advancement of materials recycling in Illinois issued a report to the governor and the General Assembly[26] recommending that 8 permanent HHW collection facilities be established in the northern part of Illinois (up from the current 4 facilities), and that 4 permanent sites be established in each of the central and southern parts of Illinois. The rationale for this recommendation was to develop a convenient, statewide HHW collection infrastructure to promote clean air, land and water for the residents of Illinois.

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[23] It should be noted that Clean Sweep grants may be issued to permanent HHW collection facilities as well as one-day events, and therefore the 52.5 pounds per participant is an average for both types of HHW collection.

[24] It was confirmed with WDEC that more recent reports are not available.

[25] Primarily permanent HHW collection sites, but also a few one-day events.

[26] Task Force on the Advancement of Materials Recycling, *Final Report, Reporting to Governor Pat Quinn and Illinois 98th General Assembly*, January 1, 2015. The task force was created pursuant to a law passed in July, 2012 and included 21 members from different stakeholder groups.

In 2019, a law amending the Illinois Solid Waste Planning and Recycling Act was passed which created the Illinois Materials Management Advisory Committee (MMAC). The MMAC's responsibilities were to investigate opportunities and create a path to increasing landfill diversion rates in Illinois over the next 20 years. Members of the MMAC were appointed by the Director of the Illinois EPA. The MMAC also prepared a report to the General Assembly, retaining the prior statewide task force's recommendation that HHW collection infrastructure in Illinois be expanded to include 8 permanent facilities in the northern part of the state and 4 permanent facilities in each of the central and southern parts of the state[27].

[27] Illinois Materials Management Advisory Committee, *Report to the General Assembly*, July 1, 2021.

SECTION 3. EVALUATION OF ONE-DAY HHW COLLECTION EVENTS

3.1 Illinois One-Day Collections

Historically, IEPA has provide funding to both permanent HHW collection facilities (refer to **Section 2**) and for one-day collection events. However, the number of one-day events sponsored by IEPA has varied significantly over the past 35 years, and fewer events received funding during the last 10 years compared to the 1990s and 2000s (refer to **Figure 3-1**).

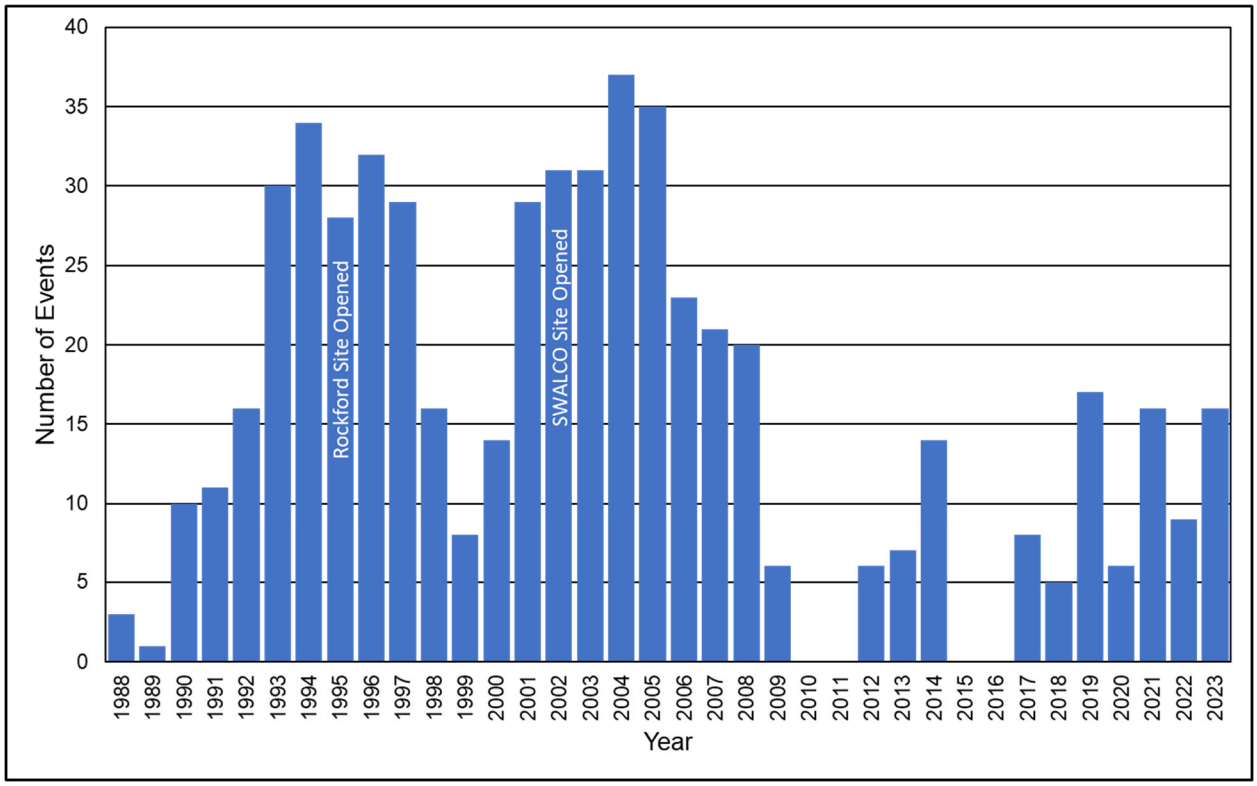


FIGURE 3-1. IEPA SPONSORED ONE-DAY HHW COLLECTION EVENTS

To provide a greater level of stability for one-day events, in 2020 the IEPA entered into agreements with 6 (now 8) local "hub" communities to more consistently provide an HHW collection event each year. The hub communities include the City of Bloomington, the City of Effingham, the City of Springfield, the City of Quincy, Champaign County, Jackson County, Peoria County and Rock Island County.

3.2 McLean County/Ecology Action Center

The Ecology Action Center (EAC), through an agreement with McLean County, the City of Bloomington and the Town of Normal, is contracted to administer and implement the County's solid waste program, including organizing and promoting household hazardous waste collection events. Over the past 25 years, 13 one-day events have been held in McClean County. Historical HHW collection for these events are provided in **Table 3-1**.

TABLE 3-1. McLEAN COUNTY HHW COLLECTION EVENTS (COLLECTION QUANTITIES)						
Year	HHW Collected (gallons)	HHW Collected (pounds)	# Vehicles	Gallons Per Vehicle	Pounds Per Vehicle	Primary Funding
1998	10,420	41,680	1,315	7.9	31.7	IEPA
2003	13,567	54,268	1,066	12.7	50.9	IEPA
2004	18,739	74,956	1,932	9.7	38.8	IEPA
2005	17,838	71,352	1,507	11.8	47.3	IEPA
2006	18,222	72,888	1,463	12.5	49.8	IEPA
2007	18,294	73,176	1,668	11.0	43.9	IEPA
2012	22,220	88,880	1,951	11.4	45.6	Local
2013	20,693	82,772	1,300	15.9	63.7	IEPA
2015	27,366	109,464	1,600	17.1	68.4	Local
2017	23,717	94,868	1,460	16.2	65.0	Local
2019	16,242	64,968	1,050	15.5	61.9	Local
2021	28,813	115,252	1,326	21.7	86.9	IEPA

Source:
1. Ecology Action Center reports.

Notes:
1. Assumed volume to weight conversion factor: 1 gallon = 4 pounds (refer to **Section 1.3**).
2. Data not shown for 2023 collection event.
3. Primary funding indicates whether IEPA provided funding (for disposal of HHW) or whether the collection event was entirely funded from local sources (i.e., McLean County, City of Bloomington, City of Normal and donated funds).

Historical participation data for the one-day collection events in McLean County are provided in **Table 3-2**. The Ecology Action Center tracks participation in two ways. The first is based on the number of vehicles attending a collection event[28] and represents the "attending household" participation rate. This participation rate is calculated by dividing the number of "attending households" (i.e., number of vehicles) by the total number of eligible households in McLean County and has averaged about 2.1 percent in recent years (2015-2021).

Since some attending households (i.e. vehicles) may bring HHW materials from more than one household, EAC also tracks a second participation rate based on the number of "participating households". This second participation rate is also calculated relative to the number of eligible households in McLean County and is higher than the "attending household" participation rate, averaging about 3.3 percent in recent years (2015-2021).

[28] Participation rates for the permanent HHW collection facilities in **Section 2** are presented on this basis (e.g., # vehicles divided by the number of eligible households in the jurisdiction).

TABLE 3-2. McLEAN COUNTY HHW EVENTS (ESTIMATED PARTICIPATION RATES)						
					Participation Rate	
Year	Attending Households	Households Per Vehicle	Participating Households	Eligible Households	Attending Households	Participating Households
1998	1,315	1.2	1,630	49,164	2.7%	3.3%
2003	1,066	1.2	1,266	53,300	2.0%	2.4%
2004	1,932	1.1	2,217	56,746	3.4%	3.9%
2005	1,507	1.2	1,744	56,746	2.7%	3.1%
2006	1,463	1.2	1,770	56,746	2.6%	3.1%
2007	1,668	1.2	2,020	56,746	2.9%	3.6%
2012	1,951	1.4	2,731	63,709	3.1%	4.3%
2013	1,300	1.4	1,829	64,016	2.0%	2.9%
2015	1,600	1.4	2,256	65,104	2.5%	3.5%
2017	1,460	2.1	3,022	65,104	2.2%	4.6%
2019	1,050	1.6	1,680	65,118	1.6%	2.6%
2021	1,326	1.2	1,606	65,118	2.0%	2.5%
Average	1,359	1.6	2,141	65,111	2.1%	3.3%

Source:
1. Ecology Action Center reports.

Note:
1. Average is for the period 2015-2021.

The county of residence for attending households at the 2021 HHW collection event is summarized in **Table 3-3**. A majority of attendees (91.3 percent) were from McLean County, with lesser attendance from adjoining counties (7.6 percent).

TABLE 3.3. McLEAN COUNTY 2021 COLLECTION EVENT (COUNTY OF ORIGIN)	
County	Attending Households (%)
McLean County	91.3%
Adjacent Counties	7.6%
Remote Counties	1.1%
Total	100.0%

Source:
1. Ecology Action Center.

Notes:
1. Adjacent counties: Champaign, DeWitt, Ford, Livingston, Logan, Piatt, Tazewell, and Woodford.

Summary financial data for two recent collection events (2017 and 2019) are provided in **Table 3-4**. It is important to note that both of those events were paid for with local funds. Had IEPA funding been available for the events, the "local" cost would have been substantially lower because the IEPA would have paid the transport and disposal costs for the collected HHW materials.

TABLE 3-4. McLEAN COUNTY HHW COLLECTION EVENTS (COLLECTION COSTS)

Expense Category	2017 Event	2019 Event
Marketing/Coordination	$12,439	$10,760
Printing	$2,721	$1,289
Event Supplies	$1,463	$4,589
Subtotal – Operating Cost	$16,623	$16,638
HHW Transport/Disposal	$127,671	$138,389
Total (with disposal)	$144,294	$155,027
# Vehicles	1,460	1,050
Operating Cost/Vehicle	$11.39	$15.84
Total Cost/Vehicle (with disposal)	$98.83	$147.64
HHW Collected (gallons)	23,717	16,242
Operating Cost/Gallon	$0.70	$1.02
Total Cost/Gallon (with disposal)	$6.08	$9.54
HHW Collected (pounds)	94,868	64,968
Operating Cost/Pound	$0.18	$0.26
Total Cost/Pound (with disposal)	$1.52	$2.38
Volunteer Hours for Event	303	302

Source:
1. Ecology Action Center reports.

Notes:
1. Conversion rate: 1 gallon = 4 pounds (refer to **Section 1.3**).
2. Value of volunteer hours not included in event costs.

Table 3-5 shows a comparison of typical annual participation, collection and cost parameters for the McLean County one-day events[29] versus two of the Illinois permanent HHW collection facilities discussed in **Section 2** (Naperville and SWALCO).

[29] In this comparison, data for McLean County events for 2015-2021 are used for greater consistency in time period reporting with the Naperville and SWALCO sites.

TABLE 3-5 COMPARISON OF HHW COLLECTION/COST DATA (McLEAN COUNTY ONE-DAY EVENTS VS. PERMANENT HHW COLLECTION FACILITIES)			
Parameter	McLean County (1-day)	Naperville (permanent)	SWALCO (permanent)
HHW Collected (gallons)	16,000 - 29,000	66,000 – 78,000	53,000 – 79,000
HHW Collected (pounds)	65,000 – 115,000	661,000 – 700,000	214,000 – 386,000
# Vehicles (annual)	1,000 – 1,600	22,000 – 24,000	3,000 – 6,700
Gallons Per Vehicle	15.5 – 21.7	2.7 – 3.5	12.9 – 17.9
# Households (county)	65,118	348,870	254,794
Participation Rate	2.1%	3.7%	2.3%
Total Cost/Vehicle (with disposal)	$98.83 - $147.64	$26.76	$75.01 - $168.38
Total Cost/Gallon (with disposal)	$6.08 - $9.54	$7.67	$5.49 - $9.75
Total Cost/Pound (with disposal)	$1.52 - $2.38	$0.77	$1.37 - $2.44

Notes:
1. Pounds collected by Naperville facility may be overstated due to use of 10 pounds per gallon conversion factor (refer to **Section 1.3**). Total cost per pound may therefore be understated.
2. For data consistency across jurisdictions, participation rates were calculated as # of vehicles divided by # households. Some participating vehicles may bring HHW from more than one household, which would result in a higher participation rate.

The following observations are made based on the comparative data in Table 3-5:

- Both the Naperville and SWALCO permanent HHW facilities serve a larger number of vehicles and collect larger quantities of HHW, in absolute amounts, compared to a McLean County one-day event. However, DuPage County (Naperville site) and Lake County (SWALCO site) are both significantly larger counties than McLean County. If the size of the "host" county is taken into account (i.e., number of households), the McLean County one-day events compare favorably to the permanent HHW collection sites.

- Participation rates for McLean County's one-day events are generally comparable to participation rates at the two permanent collection facilities.

- The cost per vehicle served is generally similar between McLean County and SWALCO. The cost per vehicle for the Naperville permanent site is lower due to the large volume of annual traffic using the Naperville facility. Note that the gallons of HHW delivered per vehicle using the Naperville site is much lower than for the SWALCO site or the McLean County one-day events.

- The cost per gallon of HHW collection and disposal is generally comparable between McLean County's one-day events and the two permanent HHW collection sites.

- The cost per pound of HHW collection and disposal is generally comparable between McLean County's one-day events and the SWALCO permanent site. The cost per pound at the Naperville facility is lower but may be understated. As previously discussed (refer to **Section 1.3**), Naperville assumes a conversion rate of 10 pounds per gallon of collected HHW material, which may overstate the pounds of HHW collected. SWALCO, which has a scale and tracks HHW quantities in both pounds and gallons, has field-verified a lower

conversion rate of 4 pounds per gallon. If this lower conversion rate were applied to the gallons collected at the Naperville site, the corresponding pounds of HHW collected would be lower, and therefore the cost per pound at the Naperville facility would be higher.

3.3 Will County

Will County has a somewhat unique program among Illinois counties for HHW collection. The County hosts several one-day collection events each year, varying in number from 4 to 6 events. These one-day events are primarily funded by the County[30] and do not include IEPA cost-sharing for disposal of the HHW materials.

In addition, Will County provides funding to the Naperville permanent HHW collection facility, and residents of the more densely populated areas in northern Will County are users of the Naperville site. Summary HHW collection and cost data are provided in **Table 3-6**.

TABLE 3-6. WILL COUNTY HHW PROGRAM (COLLECTION QUANTITIES AND COSTS)

Drop-off Program	2018	2019	2020	2021	2022	2023
# One-Day Events	6	4	4	5	4	4
# Vehicles (all events)	2,724	2,356	2,039	2,890	2,030	1,807
Vehicles Per Event	454	589	510	578	508	452
HHW Collected (pounds)	277,690	282,917	213,100	255,093	182,324	114,771
HHW Collected (gallons)	69,423	70,729	53,275	63,773	45,581	28,693
Pounds Per Vehicle	101.9	120.1	104.5	88.3	89.8	63.5
Gallons Per Vehicle	25.5	30.0	26.1	22.1	22.5	15.9
Total Cost (with disposal)	$266,631	$225,269	$199,552	$267,436	$206,652	$191,836
Total Cost/Vehicle (with disposal)	$97.88	$95.62	$97.87	$92.54	$101.80	$106.16
Total Cost/Pound (with disposal)	$0.96	$0.80	$0.94	$1.05	$1.13	$1.67
Total Cost/Gallon (with disposal)	$3.84	$3.18	$3.75	$4.19	$4.53	$6.69
Naperville Permanent Site						
Will County Vehicles	3,975	4,217	3,928	4,061	2,856	N/A
Pounds Per Vehicle	34.9	29.4	29.2	30.4	26.9	N/A
Estimated Pounds	138,728	123,980	114,698	123,454	76,826	N/A

Source:
1. Will County, Land Use Department, Resource Recovery and Energy Division.
2. City of Naperville: Will County participants and pounds per participant at Naperville HHW facility.

Notes:
1. Will County tracks HHW quantities in pounds. Gallons are estimated using a conversion rate of 4 pounds per gallon.
2. Will County HHW quantities collected at the Naperville facility are estimated based on the facility average pounds per vehicle.

[30] Some local municipalities provide cost-sharing contributions, amounting to $7,500 to $10,000.

Estimates of participation rates for both elements of the Will County HHW program are provided in **Table 3-7**.

TABLE 3-7. WILL COUNTY HHW PROGRAM (ESTIMATED PARTICIPATION RATES)						
Participation Rates	2018	2019	2020	2021	2022	2023
Drop-off Program						
# Vehicles	2,724	2,356	2,039	2,890	2,030	1,807
# Households	230,064	230,064	230,064	230,064	230,064	230,064
Participation Rate	1.2%	1.0%	0.9%	1.3%	0.9%	0.8%
Naperville Permanent Site						
# Will County Vehicles	3,975	4,217	3,928	4,061	2,856	N/A
# Households	230,064	230,064	230,064	230,064	230,064	230,064
Participation Rate	1.7%	1.8%	1.7%	1.8%	1.2%	N/A
Combined (Drop-off/Naperville)						
Participation Rate	2.9%	2.9%	2.6%	3.0%	2.1%	N/A

Source:
1. Number of households: U.S. Census, American Community Survey, 5-Year estimates, 2018-2022.
2. Other data: refer to **Table 3-6**.

The following observations are made based on the data for the Will County HHW collection program:

- Typically, more Will County residents use the Naperville permanent HHW collection site than participate in the one-day events. This is likely due to fact that the Naperville site is located in close proximity to the more densely populated areas of the County. However, users of the one-day events deliver significantly greater quantities of HHW materials versus users of the Naperville facilty.

- HHW collection quantities through the one-day collection events in Will County typically range from 88 to 120 pounds per vehicle and are generally higher than for McLean County one-day collection events (which have ranged from 62 to 87 pounds per vehicle recently).

- Participation rates for the one-day collection events in Will County are about 1 percent, lower than the 2.1 percent achieved at McLean County one-day events. However, Will County residents can also use the Naperville permanent HHW facility, and between the two programs Will County has a participation rate of about 3 percent.

- On a per vehicle basis, the cost (including disposal) of Will County one-day events is comparable to McLean County events (but on the low end of the range). However, since Will County participants typically deliver greater quantities of HHW, the cost per gallon and cost per pound are typically lower than comparable costs for the McLean County events and the SWALCO permanent HHW facility.

SECTION 4. EVALUATION OF SATELLITE COLLECTION

4.1 Solid Waste Agency of Lake County (SWALCO)

Satellite collection of HHW entails collecting HHW at remote locations (which can include one-day events) and then consolidating the material at a permanent HHW collection facility. The only jurisdiction in Illinois that employs a satellite collection model is SWALCO.

SWALCO schedules collection events on an annual basis based on the budget for the forthcoming year. Satellite events, when they are scheduled, are typically planned in select municipalities (e.g., Fox Lake, Mundelein, Lake Forest). SWALCO selects the communities for satellite collections based on their location being 10 miles or greater from SWALCO's permanent HHW facility in Gurnee. This is because participation tends to decline if residents must travel more than 10 miles (and SWALCO wants to stay outside of 10 miles of the Gurnee site for satellite events).

Satellite events have been somewhat limited in recent years due to the COVID-19 pandemic (2020) and a fire at an Ohio facility used to dispose of HHW materials under contract to IEPA (2022). The most recent year during which SWALCO had a larger number of satellite collection events was 2019. Data for that year are provided in **Table 4-1**.

TABLE 4-1. SWALCO SATELLITE COLLECTIONS

Parameter	Permanent Site	Satellite Sites
# Collection Events	25	5
# Vehicles	3,289	3,361
# Vehicles Per Event	132	672
HHW Collected (Gallons)	41,025	55,479
HHW Collected (Pounds)	164,100	221,916
Gallons Per Vehicle	12.5	16.5
Pounds Per Vehicle	49.9	66.0

Source:
1. SWALCO annual reports.

The data in **Table 4-1** indicate that satellite collections significantly increase the amount of HHW collected under the SWALCO program. HHW quantities for the 5 satellite events were greater than for the 25 collection events held at the permanent HHW collection facility[31]. HHW quantities per participant were also higher for the satellite events. These data also tend to support SWALCO's observation that participation in HHW collection events decreases if residents must travel greater than 10 miles to the collection event (otherwise, more residents would use the permanent facility in Gurnee instead of waiting for a satellite event).

[31] It should be noted that collections at the permanent site in Gurnee are by appointment only. In 2019, appointments were not required for satellite events, and therefore traffic was significantly greater for the satellite events.

SWALCO does not maintain detailed records on the cost of each type of event. However, SWALCO representatives indicated that it takes approximately 20 technicians to staff a satellite event versus 7 technicians if the collection event is held at the permanent HHW facility in Gurnee, and as a result satellite events are most costly than collections at the Gurnee site.

While satellite collections increase the amount of HHW collected by SWALCO, it should be noted that Lake County is a large county with a population of almost 700,000 residents. It does not seem likely that satellite collections would have a commensurate benefit in McClean County, where 78 percent of residents live in Bloomington and Normal.

SECTION 5. EVALUATION OF CURBSIDE COLLECTION OF HHW

Curbside collection is an emerging option for managing HHW, but within Illinois is primarily restricted to communities located in the Chicago metropolitan area. Data on quantities and costs is therefore limited, but some program parameters were identified through research for this Stage 1 analysis:

- The Village of Oak Park provides a curbside HHW option through its solid waste hauling agreement with Lakeshore Recycling Systems (LRS). Residents must call LRS to schedule a pick-up, and material setouts are capped at 70 pounds per pick-up. All households in the Village are assessed a fee of $1.20/unit/month, which corresponds to $14.40/household/year, whether they use the service or not. Based on 11,200 units under the Village's hauling agreement, this corresponds to an annual Village-wide cost of $161,280.

- The Village of LaGrange has a curbside HHW option through its solid waste hauling agreement with Lakeshore Recycling Systems (LRS). Residents must call LRS to schedule a pick-up and are charged $8.25 per item. The cost of the service is billed directly to the participating household by LRS.

- Waste Management offers a branded HHW option ("At-Your-Door") in different markets. The City of Berwyn, Village of Hillside and Village of Westchester have the At-Your-Door service included in their municipal hauling agreements with Waste Management. Residents must call the hauler to schedule a pick-up. In some cases (Berwyn, Westchester), the cost of the service is imbedded in the monthly trash rate for residents. In the Village of Hillside, the cost of the program is $1.40/unit/month, and all households are billed for the service whether they use it or not.

- The Village of Lisle has a curbside HHW option through its solid waste hauling agreement with Lakeshore Recycling Systems (LRS). Residents must call LRS to schedule a pick-up, and are provided with a 24" x 24" x 24" box to place their HHW materials in. The cost of this service per scheduled pick-up is 20 solid waste stickers, or $76 based on a unit cost of $3.80 per sticker.

- Kane County provides a curbside HHW option to the six most northern townships in Kane County (Burlington, Dundee, Elgin, Hampshire, Plato, Rutland) and the Mill Creek Special Service Area. The service is offered to residents in both incorporated and unincorporated areas. The County receives financial support through cost-sharing agreements with some municipalities (Batavia, Carpentersville, Geneva, South Elgin, West Dundee). The cost to residents is free, but service may be capped by a municipality to a fixed number of households that may participate each year. In the City of Batavia, for instance, service is limited to 22 total pickups per month, households may only participate once per year, and setouts are limited to 70 pounds per pickup. These restrictions can vary from community to community. In 2019, a total of 395 homes participated in the program, for a total cost of approximately $49,000. The average cost per pickup was $124, and the average cost per pound was $1.96. Approximately 25,033 pounds of HHW were collected, representing an average setout of 63.4 pounds per participant. Although not tracked by the County, 395 participating households would represent an estimated participation rate of 0.5%. During 2019, Kane County residents delivered an estimated 86,130 pounds of HHW to the Naperville permanent HHW collection facility.

- Based on the foregoing analysis, it does not appear that curbside collection of HHW is a feasible option in McLean County, for the following reasons:

- Curbside collection is available only in select markets. In Illinois, curbside collection primarily occurs in the Chicago metropolitan area.

- Curbside collection may not be a county-wide option for McLean County, because the service in many jurisdictions is implemented at the municipality level (through municipal hauling agreements).

- The cost per participant and the cost per pound (based on the Kane County data) fall within the range of costs for one-day events and permanent HHW collection facilities in Illinois, but at the higher end of that range. Estimated participation rates for the Kane County program, however, are lower than for one-day events and permanent HHW collection facilities. Curbside HHW collection would therefore appear to be a “premium” type service, if it was available to municipalities in McLean County.

SECTION 6. PREDICTIVE MODEL FOR McLEAN COUNTY

This section of the report develops a predictive model to estimate the quantities of HHW that might be collected by a permanent HHW collection facility in McLean County. The model is based on the research detailed in **Section 2** and **Section 3** of the report.

6.1 Predicted Participating Households

It was previously noted that household participation in HHW collection programs (whether one-day events or permanent HHW collection sites) decreases with distance from the event or site. The City of Naperville performs detailed tracking of the residency (both municipality and county) of users of the facility. **Table 6-1** provides estimates of participation within 10-mile bands around the facility (based on 2019 participation data).

TABLE 6-1. NAPERVILLE HHW FACILITY (PARTICIPATION VS. DISTANCE)

Geographic Band	Households within Band	Participants within Band	Participation Rate
0 – 10 miles	375,719	14,353	3.82%
10 – 20 miles	659,560	7,130	1.08%
20 – 30 miles	1,594,583	2,070	0.13%
30 – 40 miles	580,433	194	0.03%
Total	3,210,295	23,747	0.74%

Notes:
1. Households within Band derived using ARCGIS analysis of Census data.

The Naperville participation data was used to estimate corresponding participants for a permanent HHW collection facility in McLean County, adjusted for local population and household counts. The forecasted number of participants, again using 10-mile bands, is provided in **Table 6-2**.

TABLE 6-2. McLEAN COUNTY PERMANENT HHW FACILITY (PARTICIPATION VS. DISTANCE)

Geographic Band	Households within Band	Participants within Band	Participation Rate
0 – 10 miles	67,638	2,584	3.82%
10 – 20 miles	28,358	306	1.08%
20 – 30 miles	63,274	82	0.13%
30 – 40 miles	123,963	32	0.03%
Total	283,233	3,004	1.06%

Notes:
1. Households within Band derived using ARCGIS analysis of Census data.
2. For calculation purposes only, the permanent HHW facility was assumed to be located at the County Fairground Site in Bloomington.

The most recent one-day HHW events held in McLean County (refer to **Table 3-2**) have had from 1,050 to 1,600 attending households. Therefore, a permanent HHW collection facility in McLean County is predicted to have greater attendance than one-day collection events.

6.2 Predicted HHW Quantities

Table 6-3 summarizes HHW quantities for one-day collection programs and permanent HHW facilities based on the prior case studies. The quantity of HHW is expressed as "pounds per vehicle", which is equivalent to "pounds per attending household".

TABLE 6-3. PER VEHICLE HHW QUANTITIES BY COLLECTION METHOD					
Year	2018	2019	2020	2021	2022
One-Day Events					
McLean County	65.0	61.9	N/A	86.9	N/A
Will County	101.9	120.1	104.5	88.3	89.8
Permanent HHW Facilities					
Naperville	34.9	29.4	29.2	30.4	26.9
SWALCO	54.7	58.1	71.4	65.9	51.7
Notes: 1. All quantities are pounds per vehicle.					

Generally, participants using a permanent HHW collection facility deliver smaller quantities of HHW than participants using a one-day event. This is likely due to one-day events being scheduled on an infrequent basis, whereas permanent HHW facilities are available on a more regular basis. Thus, households participating in one-day collection events may have accumulated larger amounts of HHW over a longer period of time.

Because the SWALCO permanent HHW collection facility is equipped with a scale and all HHW quantities are weighed[32], the per vehicle weight data for the SWALCO facility is a reasonable basis for estimating quantities (in pounds) to be collected by a permanent collection site in McLean County. **Table 6-4** provides estimates of HHW for a McLean County facility based on the projected participation (i.e., number of attending households) derived in **Table 6-2**.

TABLE 6-4. McLEAN COUNTY PERMANENT HHW FACILITY (POUNDS COLLECTED)			
Pounds Per Vehicle	50	60	70
Attending Households	3,004	3,004	3,004
Total HHW Collected (pounds)	150,200	180,240	210,280

The most recent one-day HHW events held in McLean County (refer to **Table 3-2**) have collected from 65,000 pounds to 115,000 pounds annually. Therefore, a permanent HHW collection facility in McLean County is predicted to divert larger quantities of HHW materials from disposal in landfills.

[32] As discussed previously, the Naperville site estimates weight of HHW materials using an assumed conversion factor of 10 pounds per gallon, which may overstate the weight of material collected.

SECTION 7. FINDINGS

Based on the research and analysis presented in the prior sections, the following findings are made with respect to alternative methods of HHW collection in McLean County:

- ❑ Illinois current has 5 permanent HHW collection facilities (Naperville, SWALCO, Chicago, Rockford and Madison County). There are no permanent sites in central Illinois, although Champaign County is pursuing development of a facility in Urbana. The City of Bloomington is located approximately 54 miles (one-way) from the City of Urbana. Household participation at HHW facilities tends to decline when distances exceed 10 miles.

- ❑ A recent statewide task force on the advancement of materials recycling in Illinois recommended the development of 4 permanent HHW collection facilities in central Illinois.

- ❑ Neighboring states have a larger network of permanent HHW collection facilities than Illinois: Indiana (10), Iowa (28), Missouri (32) and Wisconsin (17). Each of the neighboring states has a smaller population than Illinois.

- ❑ Illinois has historically relied on one-day collection events to manage HHW. However, IEPA funding for one-day events has varied significantly over the past 35 years, with fewer events receiving funding during the last 10 years compared to the 1990s and 2000s. This variability may be mitigated somewhat going forward in that IEPA has entered into agreements with 8 local "hub" communities – including the City of Bloomington – to more consistently provide an HHW collection event each year. However, the long-term availability of funding to hub communities has yet to be demonstrated.

- ❑ Permanent HHW collection facilities in Illinois typically operate under an intergovernmental agreement with the IEPA. These agreements provide two important benefits to permanent facilities: 1) the IEPA accepts "generator" responsibility for the HHW collected; and, 2) the IEPA pays for transport and final disposal of the collected HHW. These benefits would also apply to one-day collection events funded by the IEPA; however, McLean County has had to self-fund four of the seven one-day collection events held in the County since 2012.

- ❑ Generally, the cost of one-day HHW collection events in McLean County have been comparable to permanent collection facilities (e.g., SWALCO), including cost per participant, cost per gallon and cost per pound. However, these are unit costs. McLean County one-day events have lower operating costs when disposal of HHW materials is excluded (which would be the case for one-day events funded by IEPA). The Naperville and SWALCO permanent HHW collection facilities have annual operating costs ranging from approximately $280,000 to $342,000, and Champaign County is budgeting $173,000 per year in annual operating costs. By comparison, McLean County has incurred approximately $17,000 in operating costs for one-day events (although this amount increases by $130,000 to $140,000 if IEPA funding is not provided to cover disposal costs).

- ❑ A permanent HHW collection facility in McLean County would also entail up-front capital costs. Development costs for the Naperville and SWALCO facilities ranged from $1,185,000 to $1,500,000, although Naperville secured a $900,000 state grant to defray construction costs. Champaign County is budgeting $2,000,000 to $2,500,000 in capital costs for its proposed permanent HHW collection facility.

- A permanent HHW collection facility in McLean County is projected to increase both household participation and collected HHW quantities compared to historical one-day collection events.

APPENDIX A. SWALCO HHW CONVERSION FACTORS

In 2022, the SWALCO HHW Facility obtained a scale and began weighing HHW materials as well as tracking them on a volumetric (i.e. in gallons) basis. This allows a conversion factor from pounds to gallons or from gallons to pounds to be accurately estimated.

SWALCO HHW FACILITY – SCALED WEIGHTS AND GALLONS (2023)			
Detailed Material Categories			
Material	Pounds	Gallons	(lbs/gal)
Acids	2,828	700	4.04
Aerosols (Processable)	14,846	6,000	2.47
Aerosols (Non Processable)	4,232	1,860	2.28
Antifreeze	14,333	1,550	9.25
Ammonia	684	230	2.97
Bases	4,876	1,280	3.81
Batteries (NiCad)	406	55	7.38
Batteries (Lithium)	209	50	4.18
Bleach	537	100	5.37
CFLs	958	700	1.37
4 Foot Lamps	2,002	200	10.01
Flammables	52,590	15,150	3.47
Bulk Solvent	27,253	3,750	7.27
Oil	16,495	2,503	6.59
Oil Paint (Bulked)	15,130	2,350	6.44
Pharmaceutical	2,018	830	2.43
Toxic Solids	15,182	4,450	3.41
Toxic Liquids	22,552	6,800	3.32
Lab Pack Containers	559	240	2.33
Mercury	94	55	1.71
Inorganic Acids	988	300	3.29
Asbestos	247	95	2.60
Total	199,019	49,248	4.04
Standardized Material Categories			
Material	Pounds	Gallons	(lbs/gal)
Paints	15,130	2,350	6.44
Flammables	79,843	18,900	4.22
Oil and Antifreeze	30,828	4,053	7.61
Corrosives	9,913	2,610	3.80
Oxidizers	559	240	2.33
Pesticides	37,734	11,250	3.35
Aerosols	19,078	7,860	2.43
Asbestos	264	110	2.40
Mercury and bulbs	3,054	955	3.20
PCB and reactives	0	0	
Nicad and Lithium Batts	615	105	5.86
Total	197,018	48,433	4.07

APPENDIX B. STATE OF WASHINGTON HHW COLLECTION PERFORMANCE (2014)

STATE OF WASHINGTON HHW COLLECTION PERFORMANCE (2014)							
County	Housing Units	HHW Participants	Participation Rate	Cost/ Participant	Pounds/ Participant	Total Pounds	# of Permanent Facilities
Benton	73,181	2,676	3.7%	$113.42	103.3	276,301	0
Chelan	36,651	950	2.6%	$75.66	111.8	106,215	0
Clallam	36,275	663	1.8%	$139.52	72.6	48,125	1
Clark	172,731	14,075	8.1%	$32.22	186.3	2,622,046	4
Cowlitz	44,003	2,223	5.0%	$70.10	416.5	925,824	1
Douglas	16,430	571	3.5%	$83.20	36.2	20,695	0
Franklin	26,597	362	1.4%	$18.70	10.2	3,690	1
Grant	36,341	365	1%	$137.87	169.4	61,816	1
Grays Harbor	35,634	1,975	5.5%	$167.40	60.6	119,727	1
Island	40,882	2,798	6.8%	$54.00	106.6	298,239	4
Jefferson	18,143	1,298	7.2%	$62.64	81.6	105,896	1
King	879,927	72,838	8.3%	$36.38	49.2	3,582,856	6
Kitsap	109,118	8,333	7.6%	$97.60	84.9	707,496	1
Kittitas	22,734	375	1.6%	$190.94	170.2	63,829	2
Klickitat	10,157	8,425	82.9%	$3.04	6.3	53,345	4
Lewis	34,682	1,087	3.1%	$132.34	300	326,724	1
Lincoln	5,911	390	6.6%	$37.60	150.3	53,390	1
Pacific	15,778	170	1.8%	$417.90	104.5	17,766	1
Pend Oreille	8,131	585	7.2%	$92.00	137.3	80,322	3
Pierce	334,783	11,468	3.4%	$87.50	69.7	799,218	4
Skagit	52,493	4,419	8.4%	$40.88	23.58	104,180	1
Skamania	5,791	289	5.0%	$93.78	125.6	36,285	0
Snohomish	297,613	11,243	3.8%	$55.90	77.6	872,669	3
Spokane	207,421	11,126	5.4%	$26.64	65.6	730,360	3
Stevens	21,461	192	.9%	$159.48	320.4	61,519	1
Thurston	113,281	15,375	13.6%	$24.70	15.6	240,410	1
Walla Walla	24,163	1,728	7.2%	$61.36	35.1	60,572	1
Whatcom	93,154	7,776	8.3%	$43.00	39.5	307,302	2
Whitman	20,005	1,015	5.1%	$69.65	30.3	30,777	1
Yakima	87,396	14,795	17.0%	$18.80	12.2	181,235	1
Total/Avg	2,880,867	199,585	6.9%	*$44.71*	*64.6*	12,898,829	51

Permanent Household Hazardous Waste Collection Facility Feasibility Study

Stage 2
November 2024 (Draft)

ECOLOGY ACTION CENTER

Geo-Logic ASSOCIATES

Table of Contents

Figures

Tables

Appendices

Section 1. Introduction

1.1 Purpose

This report summarizes the Stage 2 feasibility evaluation of a permanent household hazardous waste (HHW) collection facility for McLean County, Illinois. The feasibility analysis was commissioned by the Ecology Action Center (EAC).

1.2 Summary of Stage 1 Evaluation

A Stage 1 evaluation was completed in April, 2024 and included case studies of the five (5) existing permanent HHW collection facilities in Illinois, along with other research into alternative methods of managing HHW. The following points summarize the findings of the Stage 1 evaluation:

- ❑ Illinois currently has 5 permanent HHW collection facilities (Naperville, SWALCO, Chicago, Rockford and Madison County). There are no permanent sites in central Illinois, although Champaign County is pursuing development of a facility in Urbana. The City of Bloomington is located approximately 54 miles (one-way) from the City of Urbana. Household participation at HHW facilities tends to decline when distances exceed 10 miles.

- ❑ A recent statewide task force on the advancement of materials recycling in Illinois recommended the development of 4 permanent HHW collection facilities in central Illinois.

- ❑ Neighboring states have a larger network of permanent HHW collection facilities than Illinois: Indiana (10), Iowa (28), Missouri (32) and Wisconsin (17). Each of the neighboring states has a smaller population than Illinois.

- ❑ Illinois has historically relied on one-day collection events to manage HHW. However, IEPA funding for one-day events has varied significantly over the past 35 years, with fewer events receiving funding during the last 10 years compared to the 1990s and 2000s. This variability may be mitigated somewhat going forward in that IEPA has entered into agreements with 8 local "hub" communities - including the City of Bloomington - to more consistently provide an HHW collection event each year. However, the long-term availability of funding to hub communities has yet to be demonstrated.

- ❑ Permanent HHW collection facilities in Illinois typically operate under an intergovernmental agreement with the IEPA. These agreements provide two important benefits to permanent facilities: 1) the IEPA accepts "generator" responsibility for the HHW collected; and, 2) the IEPA pays for transport and final disposal of the collected HHW.

These benefits would also apply to one-day collection events funded by the IEPA; however, McLean County has had to self-fund four of the seven one-day collection events held in the County since 2012.

- ❑ In terms of efficiency, benchmark unit costs (e.g., cost per participant, cost per gallon, and cost per pound) of one-day HHW collection events in McLean County have been comparable to permanent collection facilities (e.g., SWALCO), when disposal costs are included. However, these are unit costs. Because permanent collection facilities manage larger quantities of HHW, aggregate costs are higher than for one-day events.

- ❑ A permanent HHW collection facility in McLean County would also entail up-front capital costs. Development costs for the Naperville and SWALCO facilities ranged from $1,185,000 to $1,500,000, although Naperville secured a $900,000 state grant to defray construction costs. Champaign County is budgeting $2,000,000 to $2,500,000 in capital costs for its proposed permanent HHW collection facility.

- ❑ A permanent HHW collection facility in McLean County is projected to increase both household participation and collected HHW quantities compared to historical one-day collection events.

1.3 Overview of Stage 2 Evaluation

This Stage 2 evaluation builds upon the research conducted during Stage 1 and includes the following more detailed analyses:

A. An analysis of the various federal and state regulations governing the management of HHW including permitting requirements (Section 2).

B. A conceptual HHW collection facility design that is sized to handle the quantities of HHW projected to be recovered from McLean County households (Section 3).

C. A preliminary site screening analysis to identify potentially suitable areas for development of the HHW collection facility within McLean County (Section 4).

D. An analysis of the potential local traffic impacts from a permanent HHW collection facility and design features to mitigate those impacts (Section 5).

E. An analysis of the initial capital costs and annual operating costs for a permanent HHW collection facility (Section 6).

F. A comparison of alternative staffing methods for operating a permanent HHW collection facility (Section 7).

G. A qualitative analysis of potential local economic benefits to other businesses induced by residential users of a permanent HHW collection facility (Section 8)

H. An implementation schedule for developing a permanent HHW collection facility in McLean County (Section 9).

I. An analysis of "dual permitting" (i.e., collection of residential and commercial materials at the permanent HHW facility) as a possible revenue generating mechanism to subsidize facility costs (Section 10).

J. Summary findings of the Stage 2 evaluation (Section 11).

Section 2. Regulatory Analysis

2.1 Hazardous Waste Regulatory Framework

Hazardous waste is regulated at the federal level under rules (40 CFR 261) adopted pursuant to Subtitle C of the Resource Conservation and Recovery Act (RCRA). That law is intended to control the management of hazardous waste from the point of generation to final disposal ("cradle-to-grave"). Under federal authorization, the state of Illinois has also adopted regulations governing the management of hazardous waste (35 IAC 700-739). Both sets of rules require hazardous waste from commercial and industrial generators (unless in small amounts) to be disposed or treated at a facility that is permitted to accept hazardous waste.

Although many household products (i.e., HHW) contain chemical constituents similar to those present in commercial and industrial waste, residential HHW is exempt from hazardous waste regulations due to a household exemption contained in RCRA (40 CFR 261.4). Pursuant to this exemption, HHW is excluded from the definition of hazardous waste provided that:

1. The waste is generated by individuals on the premise of a temporary or permanent residence; and

2. The waste stream is composed primarily of materials found in wastes generated by consumers in their homes.

While HHW is not regulated as a hazardous waste, it *is* regulated under Subtitle D of RCRA as a solid waste. Because of this, a permanent HHW collection facility would be required to have a non-hazardous solid waste facility permit.

Businesses that generate less than 220 pounds of hazardous waste and no more than 2.2 pounds of acute hazardous waste per month are categorized as Very Small Quantity Generators (VSQGs). Because such establishments generate "very small" quantities of hazardous waste, they may dispose of the material at a permitted non-hazardous waste facility. However, this does not apply to "universal" wastes (batteries, pesticides, mercury-containing thermostats, hazardous waste aerosol cans), which are prohibited from disposal at municipal waste landfills.

The RCRA household exclusion noted above does not extend to long-term liability under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, another federal law more commonly known as Superfund). Residential HHW materials, whether collected as part of normal trash collection services or at a permanent HHW collection facility, could have potential CERCLA liability. Therefore, permanent HHW collection facilities must employ measures to mitigate that liability.

One such measure is to secure an intergovernmental agreement (IGA) with the Illinois Environmental Protection Agency (IEPA) to manage the transport and ultimate disposal of materials collected at a permanent HHW facility. All five of the existing permanent collection sites in Illinois operate under such IGAs. Pursuant to these IGAs, the IEPA pays for disposal of the HHW materials. In addition, the IEPA accepts generator status and takes title to the HHW materials when they are picked up for disposal.

The IEPA separately contracts with a hazardous waste company to properly transport and dispose of the HHW collected at the permanent sites. As part of that agreement, the IEPA requires its contractor to maintain comprehensive liability insurance naming the permanent HHW collection facility (and IEPA) as additional insured and providing coverage and indemnifying both parties against any claims for damages or cleanup costs relating to: exposure to wastes; spills or releases of waste; or fires or explosions resulting from any acts or omissions caused by, arising out of, or occurring in connection with the contractor's picking up HHW from the facility and subsequent transport and disposal.

The IGA therefore offers important liability protections as it pertains to the transport and disposal of HHW materials *from* the permanent HHW collection facility. However, the permanent collection site would still have liability for the HHW collection and storage activities that occur at the facility.

2.2 Local Siting Approval

Facilities in Illinois that handle solid waste from more than one generator are defined to be "pollution control facilities". Under Illinois law, pollution control facilities are required to obtain local siting approval pursuant to Section 39.2 of the Illinois Environmental Protection Act (415 ILCS 5/39.2).

The local siting approval process supersedes the zoning process that is typically used for other types of property development. Once an application for local siting approval is prepared, the unit of government with jurisdictional authority has 180 days to approve or deny the application, which must be evaluated based on nine criteria specified in the statute. A public hearing must be held between 90 and 120 days of the filing of the application. Local siting can be controversial, time consuming and costly.

Permanent HHW collection facilities are exempt from local siting provided that the unit of government with jurisdiction waives the local siting process (415 ILCS 5/22.16b(d)):

> *The Agency shall establish household hazardous waste collection centers in appropriate places in this State. The Agency may operate and maintain the centers itself or may contract with other parties for that purpose. The Agency shall ensure that the wastes collected are properly disposed of. The collection centers may charge fees for their services, not to exceed the costs incurred. Such collection centers shall not (i) be regulated as hazardous waste facilities under RCRA nor (ii) be subject to local siting approval under Section 39.2 if the local governing authority agrees to waive local siting approval procedures.*

If the responsible unit of government waives the local siting process, the permanent HHW collection facility must obtain zoning approval instead (refer to Section 2.3 below).

Note that a permanent HHW collection facility that intends to take hazardous waste from VSQGs (i.e., commercial materials as distinct from residential HHW) would be required to obtain local siting approval.

2.3 Zoning Approval

Assuming that a waiver from the local siting approval process is obtained from a local jurisdiction, a permanent HHW collection facility would require zoning approval. For the purposes of this Stage 2 evaluation, the zoning codes for Unincorporated McLean County, the Town of Normal, and the City of Bloomington were reviewed.

None of the zoning codes specifically identify permanent HHW collection facilities as a land use. However, the zoning codes do identify solid-waste related uses that can be used as a reference point. The zoning districts identified for solid waste uses are summarized in Table 1.

Generally, solid-waste related uses in Bloomington and unincorporated McLean County are restricted to the M-2 zoning district. In the County, certain solid waste facilities are also allowed in the M-1 district as a special use. For the Town of Normal, waste-related uses are restricted to the S-1 (University District) or S-2 (Public Lands and Institutions District) special-service districts.

TABLE 1. ZONING DISTRICTS FOR WASTE-RELATED LAND USES

Jurisdiction	Waste-Related Land Use	Zoning District	Zoning Type
City of Bloomington	Recycling Facility	M-2	Special Use
	Refuse Disposal Services	M-2	Special Use
	Sanitary Landfills	M-2	Special Use
	Solid Waste Disposal Area	M-2	Special Use
	Waste Transfer Station	M-2	Special Use
Town of Normal	Refuse	S-1, S-2	Permitted Use
	Recycling	S-1, S-2	Permitted Use
	Sanitary Landfill	S-1, S-2	Permitted Use
Unincorporated McLean County	Construction/Demolition Debris	M-2	Permitted Use
	Landfill	M-2	Special Use
	Landscape Waste Composting	M-1, M-2	Special Use
	Solid Waste Collection/Processing	M-1, M-2	Special Use
	Waste Transfer Station	M-1, M-2	Special Use (M-1) Permitted Use (M-2)

Where designated as a "permitted" use by the zoning code, a solid-waste facility is allowable provided that the facility complies with the development requirements of the zoning code. A "special" use is typically a more intensive zoning review process.

It is apparent that the three local jurisdictions prefer that solid-waste related uses (presumably including a permanent HHW collection facility) be located in industrial areas or a special-service district. Development standards in the zoning codes may impose additional requirements. The City of Bloomington, for instance, requires solid waste facilities to be located at least 500-feet from the lot line of a dwelling or to a residential-district boundary line. The intent of these zoning

provisions is to locate solid-waste related uses away from residences and residentially-zoned areas.

This is consistent with the zoning of the five existing permanent HHW collection facilities in Illinois, as shown in Table 2. All of the existing facilities are located in manufacturing/industrial zoning districts, with the exception of the Madison County facility which is located in a community business district.

TABLE 2. ZONING OF EXISTING PERMANENT HHW COLLECTION FACILITIES

Facility	Zoning District
City of Chicago	PMD-3 (Planned Manufacturing District)
Madison County (Wood River)	B-2 (Community Business District)
City of Naperville	I (Industrial)
City of Rockford	I-1
SWALCO (Gurnee)	I-2

If a suitable property in McLean County is available but is located outside a manufacturing or special-service district, it may still be possible to develop the property as a permanent HHW collection facility. However, that would require a map amendment from the host jurisdiction, an additional step in the zoning process.

Based on the foregoing, once a candidate property (or properties) is identified for potential development as a permanent HHW collection facility, consultation with the appropriate unit of local government will be essential to:

1. Determine their willingness to host such a facility;
2. Verify the anticipated designation of such a facility as it pertains to their ordinances or whether a variance or amendment to an ordinance may be needed;
3. Confirm zoning requirements and restrictions; and,
4. Understand the full zoning application process, timeline, and required documents.

2.4 IEPA Permit Approval

Once local zoning approval (or, alternatively, local siting approval pursuant to 415 ILCS 5/39.2) is obtained, two permits will be required from the Illinois Environmental Protection Agency (IEPA): a development permit and an operating permit.

The HHW facility will be permitted as a treatment and/or storage facility. The development permit application will need to include the following information:

- ❑ Application forms
- ❑ Notifications
- ❑ Owner/operator details
- ❑ Location information
- ❑ A plan sheet of the site
- ❑ Building design details, including containment features
- ❑ Waste treatment and storage design
- ❑ A narrative description of the site's operation, including the days and hours of operation
- ❑ Stormwater management plans
- ❑ Emergency response/contingency plans
- ❑ Closure plan
- ❑ Proof of compliance with zoning requirements

The review period for this type of development permit application is 90 days, although the IEPA can request an extension in that time period. The development permit is required before construction of the HHW facility can commence.

Once the development permit is issued and construction completed, an application for operating permit must be submitted to IEPA. The review period for operating permits is 45 days.

2.5 Other Permits

In addition to the IEPA development and operating permits, other permits will be required. A building permit will be required from the unit of local government in which the permanent HHW collection facility is located.

In addition, an NPDES (National Pollutant Discharge Elimination System) permit may be required because the facility will handle HHW materials. The purpose of the NPDES permit is to regulate surface water discharges from the completed facility.

Section 3. Conceptual Design

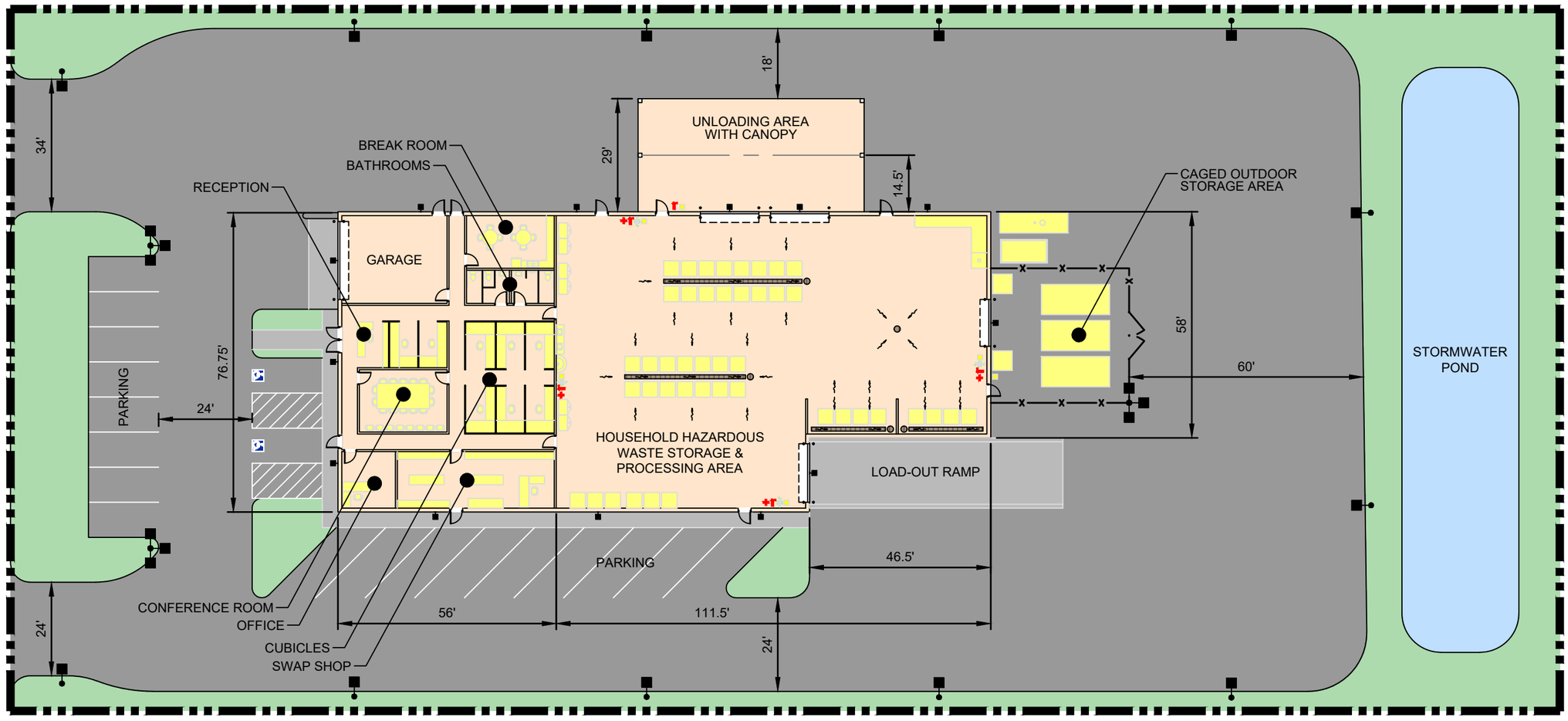
Figure 1 presents a conceptual site plan for a HHW facility that can accommodate the projected HHW quantities that were forecast in the Stage 1 report. This concept is depicted on a generic rectangular site. While it was prepared without consideration of a particular location or specific site geometrics, it can be used to inform the approximate size of a property needed for facility development. As shown, this concept is on a site that exhibits an approximate area of 1.6 acres. A site of this size can accommodate the depicted building (or similar) with sufficient parking, queuing, maneuvering area, loading/unloading activities, and stormwater infrastructure. As a comparison, lot sizes for other permanent HHW facilities in Illinois are listed in Table 3 (as estimated from aerial photography). Note the Rockford facility is currently being relocated to another site.

TABLE 3. SIZE PARAMETERS OF EXISTING PERMANENT HHW COLLECTION FACILITIES

Facility	County	Lot Size (acres)	Building (sq. ft.)
City of Chicago	Cook	2.3	24,000
Madison County/Wood River	Madison	3.6	6,200
City of Naperville	DuPage	2.1	7,800
Rockford/Four Rivers Sanitation Authority	Winnebago	1.0	11,800
SWALCO	Lake	1.3	7,200

Notes:
1. All sizes are estimates based on measurements from aerial photography.
2. SWALCO and Naperville facilities incorporated new building construction. Other facilities were developed in existing buildings.
3. Chicago facility is also used to collection electronic waste.

The developed concept includes an approximate 13,692 square foot building with an attached, covered, drive-through unloading area (not included in square footage), caged exterior area for storage of select solid wastes and gas cylinders, and a loading dock. It should be noted that the loading dock depth and design will need to be evaluated in consideration of a water table depth investigation as part of the final design process.



LEGEND

- FIRST AID KIT
- FIRE EXTINGUISHER
- EYE WASH STATION
- SPILL KIT

NOTES

1. THE CONCEPT SITE PLAN SHOWN ON THIS DRAWING IS APPROXIMATELY 1.6 ACRES IN SIZE.
2. THE BUILDING AREA IS 13,692 SQ.FT. IN TOTAL.
   - 4,312 SQ.FT. OF ADMINISTRATION.
   - 9,380 SQ.FT. OF HOUSEHOLD HAZARDOUS WASTE STORAGE AND PROCESSING.

0 30

GRAPHIC SCALE: 1" = 30'

REV.	DATE	DESCRIPTION

Geo-Logic ASSOCIATES

ECOLOGY ACTION CENTER

ECOLOGY ACTION CENTER
202 W. COLLEGE AVE.
NORMAL, ILLINOIS

CONCEPT FACILITY DESIGN

PROJECT NO.:	IL24.1059.00
DESIGNED BY:	MNF
DRAWN BY:	BWM
CHECKED BY:	MNF
APPROVED BY:	DAM

DATE: NOVEMBER 2024

FIGURE
1

The building interior includes 9,380 square feet of household hazardous waste material acceptance, sorting, bulking, storage/containment, and loadout area. Also included within the building is 4,312 square feet of administration and support area, including reception, main office, staff work stations, conference room, break room, bathrooms, a garage for indoor vehicle parking, and a material swap shop. The swap shop is an area where HHW products that are still useable, in good condition, and have their original labels, can be organized and displayed and offered free of charge to community members, promoting reuse rather than purchase of new products. Residents can browse available products, take what they need, and leave what they no longer use, making it a convenient system of reuse.

Paved passenger vehicle parking areas are shown for 19 vehicles to accommodate facility employees and visitors, and including two handicapped parking spots. The facility will need to be fenced and gated to restrict access when closed.

Traffic for the conceptual facility is envisioned as counterclockwise, though could be mirrored depending on ultimate selection. Such one-way traffic flow is recommended to avoid traffic conflicts. As shown, facility employees and users would enter the property at the lower left corner. Employees or those customers wanting to access the swap shop would either access the parking area on the left or bottom sides of the building. Those customers wanting to deliver HHW materials would circle counterclockwise to the canopied unloading area. The design will allow for unloading of up to 4 vehicles simultaneously under canopy. While not illustrated, the distance between the entrance and the unloading area is approximately 560 feet which will allow for queuing of up to 60 vehicles if two lanes are created with pavement striping and traffic cones. All vehicles would exit at the top left corner.

Once accepted in the covered unloading area, the materials would be moved into the building, segregated, and separately stored by hazard type. It is assumed that the majority of the bulked liquid materials will be stored in 55-gallon drums, although some bulked liquids may be desired to be stored in larger capacity containers (e.g. transportable totes or exterior above ground tanks). Other materials may be stored in pallets and/or Gaylord boxes, storage shelves/cabinets, or roll-off (or shipping) containers.

It should be noted that while the layout and storage configuration depicted on Figure 1 was generally designed for the projected 150,000 to 210,000 pounds of material annually as determined through the Stage 1 evaluation, it is for conceptual illustration purposes only. As previously indicated, the ultimate design will need to be developed in coordination and consultation with an architect and design team.

It is recommended that the floor within all sorting, processing, and storage areas be constructed of epoxy-coated concrete with water-stops and sloped to spill collection points. Adequate

secondary spill containment will need to be provided for different hazard types as necessary to prevent any potential mixing hazards or spills from escaping the building. Secondary containment measures may include concrete barriers, zero discharge foundation design, sumps, spill containment pallets, and/or double wall tanks. Ventilation will be required in areas where bulking of flammable liquids is performed.

It should be reiterated that this design is conceptual. Upon site selection, a new HHW facility design will ultimately need to be developed in coordination and consultation with an architect and design team and will need to incorporate structural, electrical, and mechanical engineering elements into the facility design.

Section 4. Preliminary Site Screening Analysis

A preliminary site screening analysis was performed to identify potential candidate sites for a permanent HHW collection facility in McLean County. A number of siting criteria were used to perform this analysis:

- ❑ As described in Section 3, the conceptual facility design requires approximately 1.6 acres of property. More property would be required in the event that a parcel has unusual geometry (i.e. if it is triangular in shape or otherwise has features that would render some portions inefficient or unusable).

- ❑ Based on the research performed in the Stage 1 evaluation, participation at HHW facilities declines rapidly when the facility is located further than 10 miles from the population center. As a reference point, the population centroid within McLean County is located near the intersection of Rowe Drive and IAA Drive in the City of Bloomington. To promote greater participation, an HHW facility would preferentially be located within 10 miles of that centroid.

- ❑ HHW facilities should also be located with convenient access to public roads.

- ❑ Based on the preliminary zoning analysis in Section 2.3, the M-2 and S-1/S-2 zoning districts are likely most suitable for development of a HHW facility. Further, it is preferable (and sometimes required) that HHW facilities be located on properties that do not have adjoining residentially-zoned parcels.

Using the above general parameters, a site screening of all parcels in unincorporated McLean County, the Town of Normal, and the City of Bloomington was performed to identify potential candidate sites for facility development. The screening analysis was performed using ArcGIS Geographic Information System (GIS) software, using GIS parcel data from the three units of local government.

The initial screening identified 525 sites meeting the zoning designations identified above (and within 10 miles of the population centroid). These were further screened to identify parcels with a size of 2 to 5 acres, which reduced the number of potential sites to 84 parcels.

The identified parcels were further filtered by first eliminating those that had ownership that would make procurement of the parcel unlikely (e.g. Illinois Department of Transportation) and then by visually reviewing and eliminating those parcels exhibiting geometry not conducive to development (e.g. long and skinny), or which are already developed with a substantial building and operating business. Parcels that adjoin residentially-developed areas were also excluded. During this evaluation and through review of the larger parcel array (525 sites), select larger

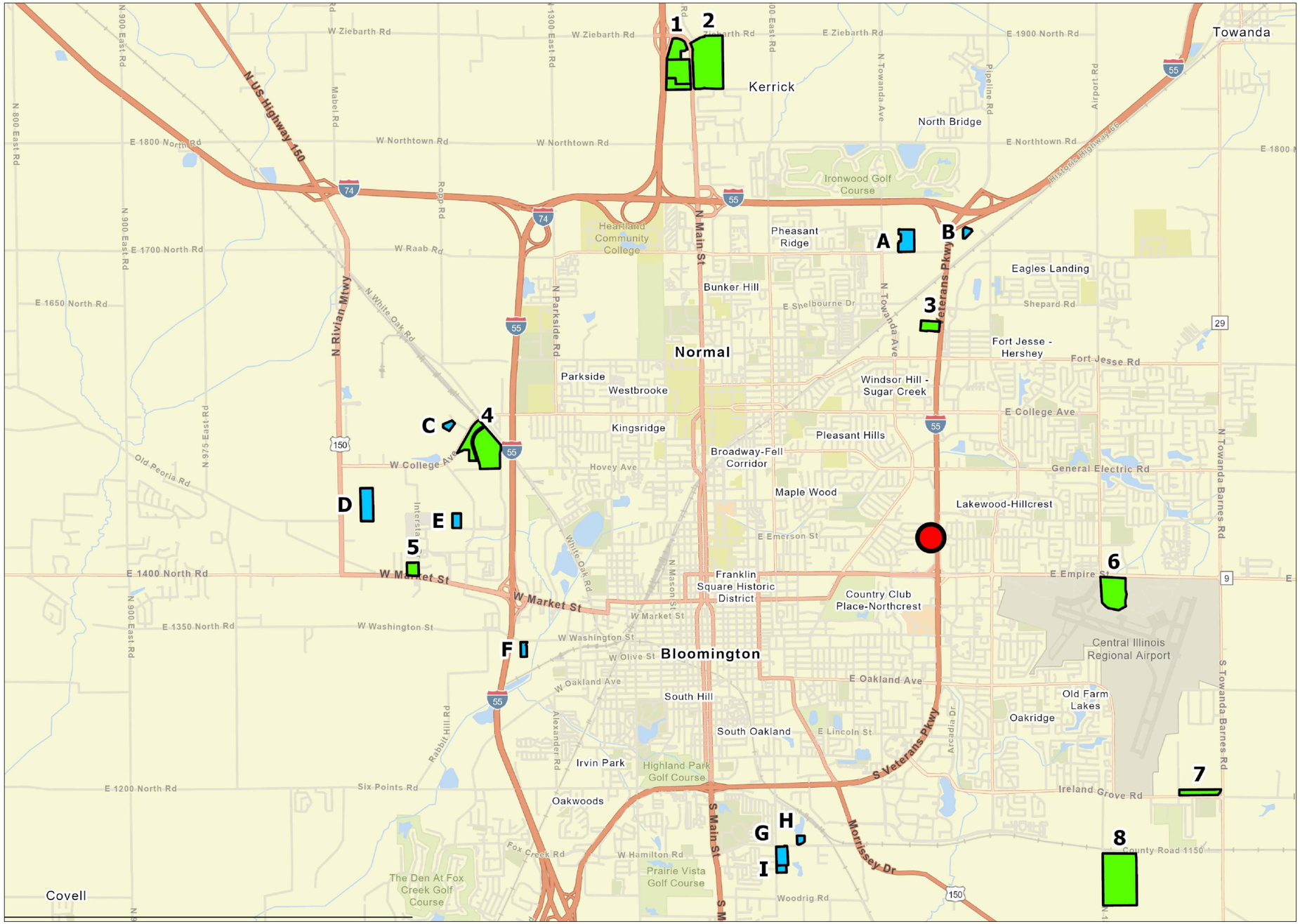
parcels (greater than 5 acres) but otherwise meeting the other screening criteria were added to the list of candidate sites. Such parcels may be viable if they can be subdivided.

Ultimately, 9 candidate sites meeting the screening criteria were identified. These sites are shown on Figure 2 (in blue, with letter designations). Summary parameters of these parcels are provided in Table 4, and aerial photos are provided in Appendix A.

TABLE 4. CANDIDATE SITES BASED ON GIS-SCREENING

Parcel	Zoning	Location	Size (acres)
A	S-2	Normal	18.8
B	M-2	Normal	3.7
C	M-2	Normal	3.9
D	M-2	Normal	23.0
E	S-2	Normal	7.0
F	M-2	McLean County (unincorporated)	4.9
G	M-2	McLean County (unincorporated)	12.0
H	M-2	McLean County (unincorporated)	3.3
I	M-2	McLean County (unincorporated)	4.1

While the GIS-evaluation incorporates land use and other siting criteria, certain site-specific factors such as availability (for purchase), and more detailed site-specific conditions (topography, drainage/stormwater discharge, and utilities) were not considered in this evaluation. These additional site-specific factors would have to be evaluated prior to proceeding with final site selection and development, which could be accomplished by retaining a land realtor.



N

0 1 MILE

GRAPHIC SCALE: 1" = 1 MILE

LEGEND

- POPULATION CENTROID
- BNEDC PARCELS
- GIS PARCELS

D:\Desktop\EAC Parcels - Title Block.dwg, 11/4/2024 4:56:56 PM

REV.	DATE	DESCRIPTION

Geo-Logic ASSOCIATES

ECOLOGY ACTION CENTER

ECOLOGY ACTION CENTER
202 W. COLLEGE AVE.
NORMAL, ILLINOIS

ECOLOGY ACTION CENTER
PRELIMINARY SITE SEARCH

PROJECT NO.:	IL24.1059.00
DESIGNED BY:	PPK
DRAWN BY:	SWW
CHECKED BY:	PPK
APPROVED BY:	PPK

DATE: NOVEMBER 2024

FIGURE
2

To further assess potential candidate sites, properties listed on the Bloomington-Normal Economic Development Council (BNEDC) website were reviewed, resulting in an additional 11 candidate properties. These sites are shown on Figure 2 (in green, with number designations). Summary parameters of these parcels are provided in Table 5, and property listings are attached in Appendix B.

TABLE 5. CANDIDATE SITES (BNEDC LISTED PROPERTIES)

Parcel	Zoning	Location	Size (acres)
1a	C	McLean County (unincorporated)	10.9
1b	C	McLean County (unincorporated)	29.3
1c	C	McLean County (unincorporated)	16.0
2	A	McLean County (unincorporated)	92.0
3	B-1	Normal	11.5
4a	M-2	Normal	17.6
4b	M-2	Normal	47.7
5	B-1	Bloomington	8.6
6	P-3	Bloomington	38.9
7	A	McLean County (unincorporated)	11.4
8	A	McLean County (unincorporated)	99.9

These sites are presumably available for development. Although generally too large for development of a HHW collection facility, several of the property listings indicated that smaller subdivided lots may be available. While most of the sites do not have M-2 or S-1/S-2 zoning, a map amendment to modify the zoning could be discussed with the appropriate unit of government. On balance (and subject to the caveat on zoning), it may be more schedule efficient in terms of identifying a suitable site to initiate property discussions with BNEDC first (Table 5 sites) as opposed to engaging a realtor to ascertain availability of candidate sites identified through the GIS-screening (Table 4 sites).

Section 5. Traffic and Throughput Analysis

Based on facility demand projections developed in the Stage 1 evaluation (e.g., number of potential households using a HHW facility), estimates of vehicle traffic for a permanent HHW collection site in McLean County were developed.

The Stage 1 evaluation estimated that 3,000 households would attend a permanent HHW collection facility on an annual basis. The projected traffic associated with this participation was estimated to be approximately 3,000 vehicles per year, corresponding to one vehicle per participating household. While it is anticipated that some households may access the facility more than once per year, it is also anticipated that some vehicles accessing the facility may deliver waste from more than one household.

Assuming that the facility is open two to eight days per month[1] (which is typical for existing HHW collection facilities in Illinois), the facility may be open 25 to 100 days per year. This will equate to an average vehicle count per event of 30 to 120 vehicles. As previously described, the conceptual facility was designed to accommodate unloading of up to 4 vehicles simultaneously and for queuing of up to 60 vehicles – more than half of (or the entirety of) the projected daily vehicle traffic at any one time. Nevertheless, it is advantageous and common for these types of facilities to operate on an appointment basis which minimizes traffic and wait times for residents. In either case, the concept facility has been designed to assure safe and efficient operation.

[1] Some Illinois facilities operate 2 days per week, which corresponds to approximately 8 days per month. Refer to discussion in Section 7.

Section 6. Cost Evaluation

6.1 Capital Costs

A permanent HHW collection facility in McLean County would entail up-front capital costs. As discussed in the Stage 1 evaluation, development costs for the Naperville facility (redeveloped in 2015) and the SWALCO facility (built in 2002) ranged from $1,185,000 to $1,500,000. Escalating these initial development costs for inflation to the present time results in estimated capital costs of $1,576,000 and $2,629,000, respectively, in current dollars. Based on the building sizes for each facility (refer to Section 3), capital costs range from $200/square foot to $365/square foot. The SWALCO facility includes the administrative offices of SWALCO in addition to the HHW collection operation, which may account for the higher square foot cost of that facility. Note that these costs do not include land or design and permitting costs.

The City of Chicago developed its permanent HHW collection facility in a former animal incinerator building (refer to case study in Stage 1 evaluation). The renovation costs to convert the building to the HHW collection operation were estimated at $3,800,000 (in 2006 dollars). Escalating to 2024 and based on a building size of 24,000 square feet, the renovation costs for the Chicago facility in current dollars are estimated at $248/square foot.

As discussed in the Stage 1 evaluation, Champaign County Environmental Stewards (CCES) is pursuing development of a new HHW collection facility in Champaign County. CCES purchased a 4.78 acre vacant parcel for $442,500 to serve as the site for the facility ($92,500/acre). Although still in development, CCES is budgeting $2,000,000 to $2,500,000 for capital costs including facility design, site improvements, building construction and permitting. Building size information for this proposed facility is not available. These costs are generally consistent with the costs of the Naperville and SWALCO facilities.

The conceptual design presented in Section 3 includes a building of 13,692 square feet. This is larger than the Naperville (7,800 square feet) and SWALCO (7,200 square feet) facilities, but the concept design includes additional features that are not employed (or not as extensively employed) as at the two existing facilities. In addition to the HHW collection/storage area (9,380 square feet), the concept design features an approximately 4,312-square foot administration and support area which includes a reception area, main office, staff work stations, conference room, break room, bathrooms, a garage for indoor vehicle parking, and a material swap shop. Using the square foot cost information from above, the capital cost of the conceptual facility is estimated at $2,738,000 to $4,998,000.

Land costs were estimated using information from the property listings obtained from the Bloomington-Normal Economic Development Council (refer to Section 4 and Appendix B).

Available parcels had listing prices that correspond to land costs of $35,000/acre to $171,000/acre. For the 1.6 acre conceptual facility, this would correspond to a total estimated land cost of $56,000 to $274,000.

Total estimated initial development costs, including allowances for permitting and architectural design fees, are summarized in Table 6:

TABLE 6. ESTIMATED CAPITAL DEVELOPMENT COSTS

Land	$56,000 - $274,000
Construction (building and site improvements)	$2,738,000 - $4,998,000
Permitting/Zoning	$100,000
Architectural/Engineering Design	$219,000 - $400,000
Total	$3,113,000 - $5,772,000

Note:
1. Land costs based on 1.6 acres and land cost of $35,000/acre to $171,000/acre.
2. Construction based on 13,692 square feet and construction costs of 200/sq. ft. to $365/sq. ft. HHW collection/storage area is approximately 70% of total building area. Administration/support area is approximately 30% of total building area.
3. Architectural/engineering design costs estimated at 8% of construction cost.

6.2 Operating Costs

As detailed in the Stage 1 Report, the Naperville and SWALCO permanent HHW collection facilities have annual operating costs ranging from approximately $280,000 to $342,000. CCES, which is proposing a new HHW collection facility in Champaign County, is budgeting $173,000 in annual operating costs. Operating costs include labor (permanent and contracted), supplies, equipment rental, and facility repairs and maintenance. Note that operating costs do not include disposal/recycling costs for collected HHW materials (see discussion in Section 6.3 below).

6.3 HHW Disposal/Recycling Costs

Each of the five existing permanent HHW collection facilities in Illinois operates under an intergovernmental agreement (IGA) with IEPA, under which IEPA arranges (through a separate contract with a hazardous materials service provider) to dispose or recycle the collected HHW materials. As discussed in Section 2, the IEPA pays for transport and final disposal of the collected HHW, reducing the cost to operate a permanent HHW facility.

Another benefit of the IGA is that the IEPA, through its HHW disposal contractor, will provide training for the personnel staffing the permanent HHW collection facility, at the IEPA's expense. The training consists of a minimum two-day course of no less than 15 hours and addresses:

- ❑ Federal and state legal requirements pertaining to HHW handling.
- ❑ The methods of collecting HHW from the public and identifying unknown materials.
- ❑ Bulking procedures, the use of different types of containers, record keeping, storage procedure, and fire safety and emergency precautions and procedures.
- ❑ Procedures for waste shipment, including packaging, labelling and manifest preparation.
- ❑ Procedures for long-term record keeping, including records of waste received, manifests and disposal information.
- ❑ The development of an emergency plan addressing spill clean-up and first aid in the event of a release or spill, and police and fire protection.
- ❑ Field practice in waste segregation, bulking, packaging and record keeping.

In return for paying HHW disposal costs, the IGA requires that any permanent HHW collection facility receiving IEPA funding must be available to any resident of the State of Illinois. Further, IEPA will not pay for the disposal of certain types of materials including ammunition, explosives, radioactive materials, lead-acid batteries, latex paints, compressed gas containers (other than aerosol containers), controlled substances, potentially infectious medical wastes, and non-special, non-contaminated wastes including trash and non-hazardous debris.

Finally, the IEPA will only pay for disposal of *residential* HHW materials. The IGAs for the five existing permanent HHW collection facilities stipulate that the facilities shall reject all wastes from business, institutional, industrial, agricultural, government or commercial entities unless agreed in writing by the IEPA and the facility. Thus, while not strictly prohibiting a permanent HHW collection facility from accepting hazardous materials from commercial sources, the IEPA will not pay for disposal of those materials[2].

[2] As discussed in Section 2, acceptance of commercial hazardous materials from VSQGs would also require a permanent HHW collection facility to obtain local siting approval pursuant to 415 ICLS 5/39.2.

6.4 Financing

As noted in Section 6.3, the IEPA will pay for disposal of HHW materials collected at a permanent HHW collection facility pursuant to an IGA. However, the IGA covers disposal costs only, and capital costs are expressly excluded.

All of the five existing permanent HHW collection facilities in Illinois were developed by local governments using local funds. Some of the facilities defrayed development costs using grant funding, as noted in the Stage 1 evaluation:

- Naperville paid for a portion of the $1,185,000 capital cost to redevelop its HHW facility (in 2015) using $900,000 in grant funding from the Illinois Department of Commerce and Economic Opportunity.
- Chicago paid for a portion of the $3,800,000 renovation cost to convert a former animal incinerator into an HHW facility (in 2006) using financial support of $1,096,000 from the IEPA, Illinois Department of Commerce and Economic Opportunity, and the Illinois Clean Energy Fund.

The federal Bipartisan Infrastructure Law (2021) provided $275,000,000 in national funding (to be administered by U.S. EPA) to stimulate additional investment in recycling infrastructure. Through the end of federal fiscal year 2026 (10/2026), the U.S. EPA will be distributing "Solid Waste Infrastructure for Recycling" or "SWIFR" grants on a competitive basis. SWIFR grants can be used for HHW collection facilities, provided that the HHW materials are recycled. Household batteries (lithium, NiCad), compact fluorescent tubes, and mercury-containing wastes are recycled under the IEPA's disposal contractor agreement. In addition, the HHW swap-shop feature included in the conceptual design (refer to Section 3) may also qualify as a "recycling' activity. Individual grants of up to $5,000,000 are available, and these grants are specifically intended for capital costs.

As discussed in Section 6.1, CCES is pursuing the development of a new permanent HHW collection facility in Champaign County. CCES has raised initial funding of approximately $1,075,000 from three units of local government to help defray initial capital costs: Champaign County ($650,000), City of Urbana ($175,000) and City of Champaign ($250,000). Champaign County and the City of Urbana used funds from the federal American Rescue Plan Act for their contributions. The City of Champaign used money from its general operating fund to pay for its contribution.

Section 7. Operating Strategies

7.1 Operating/Staffing Considerations

This section evaluates alternative operating strategies[3] for a permanent HHW collection facility, including contracted operations, in-house staffing, and intergovernmental agreements with nearby communities. For the purposes of evaluating operating strategies, it is useful to summarize the operating parameters of the five existing permanent HHW collection facilities in Illinois (refer to Table 7) as discussed in the Stage 1 evaluation.

TABLE 7. OPERATING HOURS (EXISTING ILLINOIS PERMANENT HHW COLLECTION FACILITIES)

Facility	Monthly Operating Schedule	
City of Chicago	Tuesday: Thursday: First Saturday of Month:	7:00 am to 12:00 pm 2:00 pm to 7:00 pm 8:00 am to 3:00 pm
Madison County/Wood River	Third Friday of Month: First Saturday of Month:	8:00 am to 12:45 pm 8:00 am to 12:45 pm
City of Naperville	Saturday: Sunday:	9:00 am to 2:00 pm 9:00 am to 2:00 pm
City of Rockford/Four Rivers Sanitation Authority	Saturday:	8:00 am to 4:00 pm
SWALCO	Two Saturdays per Month:	7:00 am to 1:45 pm

Two of the existing facilities (Madison County and SWALCO) operate two days per month. Two of the existing facilities (Chicago and Naperville) operate two days per week (or approximately eight days per month), with the Chicago facility adding one additional monthly collection on the first Saturday of the month. One facility (Rockford) operates four days per month.

From a staffing perspective, these operating schedules present two considerations that must be balanced. First, because the HHW facilities are open two days per week or two days per month, full-time employment is not required[4]. On the other hand, to manage customers during the days when an HHW facility is open, more than one person is typically required. Thus, operating an HHW

[3] This section evaluates operating alternatives. The ownership of a permanent HHW collection facility would also need to be determined. The IEPA intergovernmental agreements discussed in Section 2.1 and Section 6.3 are authorized by the Intergovernmental Cooperation Act and therefore require that a permanent HHW collection facility be owned by a public agency such as a unit of local government.

[4] SWALCO does have a full-time employee to manage its HHW facility. However, that person performs other duties for SWALCO in addition to HHW operations.

facility requires multiple, part-time staffers. In addition, there will be administrative aspects to manage a permanent HHW collection facility (e.g., scheduling of appointments, record keeping, etc.), which would typically occur outside normal facility operating hours.

7.2 Contracted Operations

Contracting operations involves hiring a private company (or other entity such as a not-for-profit) to staff the HHW collection facility and handle the collection and storage of HHW materials. This can be a beneficial approach as private contractors often have specialized knowledge and experience in handling hazardous waste, including compliance with environmental regulations. Contracted services may also be more cost-efficient by avoiding the need to recruit, train, and manage specialized staff. Further contractors may carry their own insurance and regulatory responsibilities, reducing liability for the municipality. Finally, it can be a flexible approach as contract terms can be adjusted to reflect changing needs, seasonal demand, or service frequency.

Contracted operations would not, however, eliminate the need for oversight and management responsibilities for the owner of the HHW collection facility.

To implement contracted operations, a Request for Proposal (RFP) would be developed and issued to potential service providers. As part of the RFP document, a services agreement (i.e., contract) would have to be developed.

7.3 In-House Staffing

In-house staffing involves hiring and training employees of the facility owner to operate and manage the HHW facility directly. Due to the limited operating days for HHW collection facilities, in-house operation would necessitate the hiring of multiple employees on a part-time basis. Further, those part-time employees would have to be trained on proper handling of HHW materials. The part-time nature of the work, combined with the need for specialized training, could present challenges to recruiting and retaining employees.

As noted above, SWALCO does have (one) full-time employee to manage its HHW facility and oversee administrative aspects of the facility. That employee also performs other functions for SWALCO. To address the labor needs on scheduled operating days for the HHW collection facility, SWALCO contracts with a private company (currently Veolia Environmental Services) to provide service technicians. Typically, seven service technicians are contracted for the Saturday collection events (two per month) hosted at the SWALCO facility.

7.4 Intergovernmental Agreements

Intergovernmental agreements (IGA) involve collaboration with other units of government to share resources and responsibilities for HHW collection at a permanent facility. The City of Naperville's facility, for instance, is managed by the City but is staffed by fire department personnel. Such personnel typically have extensive training in safely managing hazardous materials.

Intergovernmental agreements share many features with contracted operations in that an "agreement" for staffing is negotiated with a unit of government (or government department) to provide the necessary staffing. Like private contracting, however, the owner of the HHW facility would have to provide management and oversight of the facility and operations.

As noted in Section 6.1 (and the Stage 1 evaluation), Champaign County Environmental Stewards (CCES) is pursuing development of a new HHW collection facility in Champaign County. As discussed in the Stage 1 evaluation, that facility would be too far (approximately 54 miles one-way) to effectively serve McLean County residents. However, because Champaign County is located in the same region as McLean County, there could be an opportunity for some type of joint-staffing arrangement between the two facilities, particularly with respect to service technicians. That type of arrangement would require coordinating (i.e., staggering) operating days for the two facilities, but could be formalized through an intergovernmental agreement.

Further, IGAs may be required to fund development of a permanent HHW collection facility in McLean County, as capital costs may need to be spread across multiple units of local government. CCES is pursuing this type of development strategy for the Champaign County facility, as discussed in Section 6.4.

Section 8. Traffic-Induced Economic Benefits

EAC's scope of work for this feasibility analysis of a permanent HHW collection facility includes consideration of whether an HHW facility could potentially provide induced economic benefits for nearby businesses. In particular, could existing commercial businesses obtain some benefit by residential users of the HHW facility passing by their businesses enroute to the HHW facility?

Qualitatively, this is plausible because the HHW facility will bring increased traffic to the area where it is located. As previously described in Section 5, a HHW facility in McLean County is projected to attract an average vehicle count of 30 to 120 vehicles per collection day. All of the five existing HHW collection facilities operate on weekends, when households typically perform errands including trips to stores.

However, as discussed in Section 2, local zoning codes (City of Bloomington, Town of Normal, unincorporated McLean County) indicate a preference for waste-related land uses to be developed in industrial or special-service zoning districts. As a general matter, therefore, zoning requirements may limit the extent/frequency to which users of the HHW facility pass by commercial businesses.

One of the sites identified through the preliminary site screening (Section 4) is a property listed by the Bloomington-Normal Economic Development Council. This approximately 11.5 acre parcel[5] is located adjacent to a Home Depot store on Veterans Parkway in a commercial corridor. Here, there are potentially mutual benefits to an HHW collection facility (i.e., households making a shopping trip to Home Depot could also drop-off HHW materials at the collection facility and vice versa).

However, this would require additional consultation with other stakeholders. The site is located in the Town of Normal and is zoned B-1. The Town of Normal would have to be willing to consider a map amendment to rezone a portion of the property to an S-1 or S-2 designation (the Town may prefer to have another retail operation developed on the site). While an HHW facility would bring more customer traffic to Home Depot, the retailer's opinion as to whether that is beneficial (or detrimental to their current store operations) would have to be considered. Property costs would also have to be assessed: commercially-zoned properties may have higher purchase costs than industrially-zoned lots. This 11.5 acre parcel would also have to be subdivided into an approximately 1.6 acre lot for the conceptual HHW facility, and sublot opportunities would have to be discussed with the property owner.

[5] The property is designated as Site 3 on Figure 2. A property summary is provided in Appendix B.

Section 9. Implementation Schedule

Should EAC determine to move forward with the development of a permanent HHW collection facility in McLean County, the following implementation steps would be required:

1. Present feasibility analysis to local units of government (City of Bloomington, Town of Normal, McLean County). The purpose of this step is to ascertain local government interest in sponsoring and/or hosting a permanent HHW collection facility, and to develop cost-sharing arrangement for initial development costs. The ownership of the property and the HHW facility by a unit of local government or some other public agency would also have to be determined. This step would also include consultation with IEPA on a draft IGA for disposal services.

   Duration: 3 - 6 months

2. Property acquisition. This step would entail engaging a property realtor and/or meetings with the BNEDC to identify a preferred site for the HHW collection facility. Optioning or purchasing a parcel would require funding to be in-place.

   Duration: 3 months

3. Zoning process. This step would involve preparation of zoning documents and the zoning approval process. A waiver from local siting approval (415 ILCS 5/39.2) would also have to be obtained from the host unit of local government.

   Duration: 4 - 6 months

4. IEPA development permit. This step would involve preparation of the IEPA development permit application and review of the application by IEPA.

   Duration: 6 months

5. Construction procurement. A determination will have to be made as to whether to use design-bid-build or design-build as the method of project delivery. Design-build is typically a faster method of project delivery and is assumed for the schedule.

   Duration: 3 months

6. Final design/construction (assuming design/build). This step would entail contracted services with a design-build firm to prepare final engineering/architectural design plans, secure building permits, and construct the facility.

   Duration: 12 – 18 months

7. IEPA operating permit. This step is to submit and secure an IEPA operating permit following substantial construction of the HHW facility.

   Duration: 2 months

The above steps result in a total estimated implementation schedule of 33 – 44 months. This schedule assumes that all steps are performed in a serial (i.e., sequential) manner. It is possible that the overall schedule could be reduced if certain steps are performed in parallel. For instance, there could be partially overlapping schedules for zoning (Step 3) and the IEPA development permit application (Step 4). However, the IEPA may require final zoning authorization prior to issuing a development permit.

Procurement of a design-build contractor (Step 5) may also overlap with the IEPA development permit process (Step 4). However, securing the IEPA development permit would be recommended prior to commencing the final architectural/engineering design (Step 6) of the HHW facility and the development permit will be required prior to starting construction.

Pursing the two overlapping steps noted above in parallel might reduce the overall implementation schedule by 6 months.

Section 10. Dual-Permitting Analysis

EAC's scope of work for this feasibility analysis includes consideration of dual-permitting of the permanent HHW collection facility to accept commercial materials (i.e., VSQG) in addition to residential HHW. The rationale for dual permitting would be to accept some quantity of commercial waste as a potential source of revenue to support overall facility operations.

Accepting hazardous materials from VSQGs would pose several challenges:

- ❑ The permanent HHW collection facility would have to be approved through the local siting processing (415 ILCS 5/39.2), which is more time consuming and costly than zoning.
- ❑ The manager of the permanent HHW collection facility would have to verify the status of the commercial waste generator as a VSQG in order to accept the material.
- ❑ The IEPA will only pay for disposal of *residential* HHW materials pursuant to its intergovernmental agreement (IGA). Disposal of VSQG waste would have to be separately arranged for, and paid by, the permanent HHW collection facility.
- ❑ Further, the IEPA may not extend the liability protections of the IGA to commercial materials. As a result, the permanent HHW collection facility would have to secure equivalent comprehensive liability insurance and indemnification from the private contractor hired to separately transport and dispose of the commercial materials. Even if this were obtained, the IEPA will assume generator status only for *residential* HHW materials under its IGA. It is not clear whether a local unit of government would accept generator status on behalf of private businesses in the community.

As noted previously, none of the five existing permanent HHW collection facilities in Illinois accept hazardous materials from commercial sources.

Section 11. Findings

Based on the research and analysis presented in the prior sections, the following findings are made with respect to the Stage 2 feasibility evaluation of a permanent HHW collection facility in McLean County:

- ❑ A permanent HHW collection facility would be regulated as a non-hazardous solid waste facility and would require an IEPA development permit and operating permit.

- ❑ Solid waste facilities in Illinois require local siting approval pursuant to the siting process specified in Section 39.2 of the Illinois Environmental Protection Act (415 ILCS 5/39.2). That process can be costly, time-consuming and controversial. However, a permanent HHW collection facility can avoid the Section 39.2 process provided that the facility handles only residential material and provided that a waiver is obtained from the host unit of government. If those two conditions are met, a permanent HHW collection facility would require zoning approval instead of the more laborious Section 39.2 local siting approval.

- ❑ In order to provide convenient access to residents, a permanent HHW collection facility should be located within 10 miles of the population centroid of McLean County. Potential host jurisdictions within this radius include the City of Bloomington, the Town of Normal, and unincorporated McLean County.

- ❑ The zoning ordinances for those jurisdictions generally confine the development of solid waste facilities (assuming the Section 39.2 siting process is waived) to industrial or special service zoning districts. Development of a permanent HHW collection facility in other zoning districts would necessitate a map amendment, an additional step in the zoning process.

- ❑ A permanent HHW collection facility that is sized to meet the anticipated demand from McLean County residents would consist of an approximately 13,692 square foot building on a 1.6 acre property.

- ❑ A GIS-based screening analysis of land parcels within a 10-mile radius of the population centroid identified 9 candidate sites which have the required industrial or special service district zoning. The availability of these sites for purchase would have to be further evaluated by engaging a realtor.

- ❑ In addition, properties listed by the Bloomington-Normal Economic Development Council were reviewed, resulting in an additional 11 candidate sites. All of these sites are larger than required, although several listings indicated that smaller sub-divided lots may be available. In addition, most of these sites did not have the requisite industrial or special

service district zoning, and therefore map amendments for those properties would have to be discussed with the jurisdictional zoning authority. Notwithstanding the additional zoning effort, these properties have the advantage of being available for development.

- ❑ Capital costs for a permanent HHW collection facility, including land, permitting, design and construction are estimated at $3,113,000 to $5,772,000. The five existing permanent HHW collection facilities in Illinois were developed by local governments using local funds. Some of the jurisdictions defrayed a portion of development costs using grant funds.

- ❑ Annual operating costs for a permanent HHW collection facility (excluding disposal costs) are estimated at $280,000 to $342,000 per year.

- ❑ Disposal costs for HHW materials can be paid through an intergovernmental agreement (IGA) with the IEPA (provided that state-funding is made available). The five existing collection facilities in Illinois all have such agreements. An additional benefit of the IGA is that the IEPA assumes generator status for the collected hazardous materials. However, only residential HHW (not commercial waste) is covered by the IGA.

- ❑ Existing permanent HHW collection facilities typically operate a couple of days per week, and in some cases a couple of days per month. Because of these limited operating hours, and because facility staff must receive specialized training, some form of contracted labor is anticipated (versus full-time employees), although a facility manager may be employed on a full-time basis.

- ❑ A permanent HHW collection facility is estimated to attract 30 to 120 household users per operating day, with equivalent passenger vehicle traffic. A site size of 1.6 acres would provide adequate queuing space for half or more of these vehicles, preventing vehicle backups onto public roads and mitigating potential traffic impacts. Since HHW facilities typically operate on weekends, when households also perform shopping errands, there could be a beneficial impact to other nearby businesses if users of the HHW facility combine their trip with other shopping errands. However, this induced benefit may be limited to the extent that the HHW facility is restricted to an existing industrially-zoned area.

- ❑ Implementation of a permanent HHW collection facility will necessitate multiple development steps (e.g., property acquisition, zoning and permitting, design, construction) and is anticipated to take 33 – 44 months if each step is undertaken sequentially. This schedule could perhaps be reduced by about 6 months if certain overlapping steps are performed in parallel.

- ❑ The first implementation step entails EAC presenting the feasibility study to local units of government (City of Bloomington, Town of Normal, McLean County) to ascertain local government support for developing a permanent HHW collection facility and/or potentially hosting the facility.
- ❑ Dual-permitting of the facility to accept both residential HHW and hazardous materials from small commercial generators would have multiple, significant challenges to overcome including a more intensive regulatory approval process and potentially increased liability exposure.

Appendix A
Candidate Sites (GIS-Screening)

Candidate Site A (Normal, 18.8 acres, S-2 Zoning)

Candidate Site B (Normal, 3.7 acres, M-2 Zoning)

Candidate Site C (Normal, 3.9 acres, M-2 Zoning)

Candidate Site D (Normal, 23.0 acres, M-2 Zoning)

Candidate Site E (Normal, 7.0 acres, S-2 Zoning)

Candidate Site F (Unincorporated McLean County, 4.9 acres, M-2)

Candidate Site G (Unincorporated McLean County, 12.0 acres, M-2 Zoning)

Candidate Site H (Unincorporated McLean County, 3.3 acres, M-2 Zoning)

Candidate Site I (Unincorporated McLean County, 4.1 acres, M-2 Zoning)

Appendix B
Candidate Sites (BNEDC-Listings)

2613 N Main - 56 Acres

2643 N Main Street | Normal, IL | US | McLean County
Available Acres: 56 | **Sale Price:** $4,213,000

Sale Price:	$4,213,000
Sale Price Note:	$75,232/AC
Last Updated:	Sep 30, 2024

Economic Development Contact

Casey Peterson
B-N Economic Development Council
200 W. College Ave Ste. #402
Normal, IL 61761
(309) 452-8437 | casey@bnedc.org

Realtor/Owner Contact

Melissa Dittbenner
Berkshire Hathaway HomeServices
309-275-5670 | melissa@IL-Broker.com

Property and Area Description

This beautiful piece of land is ready for Development! Located between the major highways with easy access to I55, I74, US 51. Many anchoring businesses nearby in fast growing area. Sitting on 56 acres anchored by one of Rivian's biggest warehouses! 56 acres Ready for development! Includes 3 total parcels. Seller willing to separate.

Population

10 Mile Radius	20 Mile Radius	30 Mile Radius
144,307	189,912	310,586

Source: ESRI®, 2024

Households

10 Mile Radius	20 Mile Radius	30 Mile Radius
59,635	77,446	126,351

Source: ESRI®, 2024

Transportation

Nearest Highway: Rt 51
Nearest Interstate: I-74, I-55, I-39
Nearest Airport: Central Illinois Regional Airport (BMI)
Nearest Commercial Airport: Central Illinois Regional Airport (BMI)
Rail Served: No
Rail Served By: Unknown
Rail Accessible: Unknown
Rail Infrastructure in Place: No

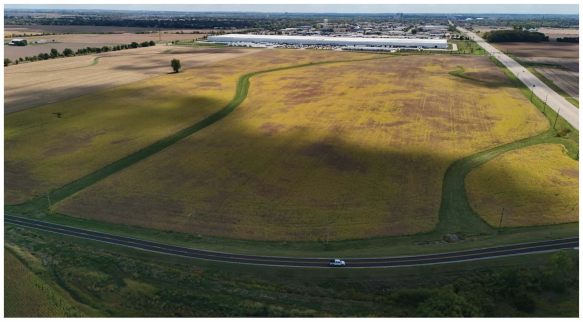
Utilities

Natural Gas: Nicor Gas
Water: Town of Normal

Candidate Site 1a/1b/1c (Unincorporated McLean County, 56.0 acres, C Zoning)

Kraft Farm - 92 Acres

| Normal, IL | US | McLean County
Available Acres: 92.01 | **Sale Price:** $3,250,000



Zoning:	Agriculture
Within City Limits:	Yes
Site Dimensions:	500000 SF
Sale Price:	$3,250,000
Last Updated:	Oct 1, 2024

Economic Development Contact

Casey Peterson
B-N Economic Development Council
200 W. College Ave Ste. #402
Normal, IL 61761
(309) 452-8437 | casey@bnedc.org

Realtor/Owner Contact

David Myron - VP of Finance
Illinois Wesleyan University
309-556-3021 | dmyron@iwu.edu

Property and Area Description

Build to suit opportunity at the intersection of I-39, I-55, & I-74; visible from I-39. Two hours to Chicago, St. Louis & Indianapolis.

Population

10 Mile Radius	20 Mile Radius	30 Mile Radius
144,407	189,604	308,837

Source: ESRI®, 2024

Households

10 Mile Radius	20 Mile Radius	30 Mile Radius
59,682	77,312	125,618

Source: ESRI®, 2024

Transportation

Nearest Highway: Rt 51
Nearest Interstate: I-74, I-55, I-39
Nearest Airport: Central Illinois Regional Airport (BMI)
Nearest Commercial Airport: Central Illinois Regional Airport (BMI)
Rail Served: No
Rail Served By: Unknown
Rail Accessible: Unknown
Rail Infrastructure in Place: No

Utilities

Natural Gas: Nicor Gas
Water: Town of Normal
Sewer: Municipal

Candidate Site 2 (Unincorporated McLean County, 92.0 acres, A Zoning)

11.5 Acres next to Home Depot

795 Veterans Pkwy | Normal, IL | US | McLean County
Available Acres: 11.49 |

Zoning:
Last Updated: Sep 30, 2024

Economic Development Contact

Casey Peterson
B-N Economic Development Council
200 W. College Avenue, Suite 402
Normal, IL 61716
(309) 452-8437 | casey@bnedc.org

Realtor/Owner Contact

Keith Valentine
| kvalentine@retail-pa.com

Property and Area Description

Located along Veterans Pkwy., which is the main commercial corridor in Bloomington-Normal, IL, home to major shopping centers and employers Approximately 3.5 miles from State Farm Corporate Headquarters (15,000 employees) and Country Financial (3,868 employees) Convenient access just off the I- 55 Interchange Less than 3 miles from Illinois State University (enrollment of over 20,000 students and 3,500 employees) Located adjacent to the Home Depot in Normal, IL

Population

10 Mile Radius	20 Mile Radius	30 Mile Radius
146,300	180,341	278,191

Source: ESRI®, 2024

Households

10 Mile Radius	20 Mile Radius	30 Mile Radius
60,236	73,655	112,953

Source: ESRI®, 2024

Transportation

Rail Served: Yes
Rail Served By: Union Pacific Railroad
Rail Accessible: Yes
Rail Infrastructure in Place: Unknown
Rail Contact: Ryan Wee
Rail Contact Phone: 262-277-8725
Rail Contact Email: rwwee@up.com

Candidate Site 3 (Normal, 11.5 acres, B-1 Zoning)

Interchange City West Normal

W. College Avenue | Normal, IL | US | McLean County
Available Acres: 237 | **Sale Price:** $25,648,500

Zoning:	Industrial-Heavy, Manufacturing, Industrial-Light, Commercial
Setting:	Agricultural Land
Within City Limits:	Yes
Specialty Features:	Enterprise Zone,Featured Property
Sale Price:	$25,648,500
Sale Price Note:	$2 - $6.20/SF
Last Updated:	Nov 4, 2024

Site Certification Information

Certified Site Status: Yes
Certified Site: Intersect Illinois Vetted Sites

Economic Development Contact

Casey Peterson
BNEDC
200 W College Ave
Normal, IL 61761
(309) 452-8437 | casey@bnedc.org

Realtor/Owner Contact

Jill Spratt
SVN Core 3
(309) 590-7900 ext 302 | jill.spratt@svn.com

Property and Area Description

Excellent land available to build on in West Bloomington/Normal. ~237 Contiguous acres, on a variety of lot locations. Lot sizes from 0.7 acres up to 69.9 acres. Flexibility to combine parcels or divide in most cases. Various zoning depending on lot, offering B1, M1, M2 and R3A. Easy access to Interstate 74/55/39 and IL Route 9. Infrastructure on site, access roads currently under construction

Population

10 Mile Radius	20 Mile Radius	30 Mile Radius
146,182	189,064	310,219

Source: ESRI®, 2024

Households

10 Mile Radius	20 Mile Radius	30 Mile Radius
60,149	77,035	126,915

Source: ESRI®, 2024

Transportation

Nearest Highway: I55 (1 mi.)
Nearest Interstate: I74 (1 mi.)
Nearest Airport: Central Illinois Regional Airport (7 mi.)
Distance to Mass Transit: Connect Transit HQ 0.3 miles from site
Rail Served: Yes
Rail Served By: Unknown, Norfolk Southern Railway
Rail Type: Active
Rail Accessible: Yes
Rail Infrastructure in Place: Yes

Utilities

Natural Gas: Nicor
Water: Town of Normal
Sewer: Bloomington Normal Water Reclamation Disctrict (BNWRD)

Candidate Site 4a/4b (Normal, 237.0 acres, M-2 Zoning)

Interstate Business Park / West Gate Plaza

Interstate Drive | Bloomington, IL | US | McLean County
Available Acres: 8 | **Sale Price:** $1,370,527

Zoning:	Commercial, Manufacturing
Adjacent Available Acres:	10
Within City Limits:	Yes
Sale Price:	$1,370,527
Sale Price Note:	375k SF @ $3.65/SF
Last Updated:	Sep 30, 2024

Economic Development Contact

Casey Peterson
BNEDC
200 W College Ave
Normal, IL 61761
(309) 452-8437 | casey@bnedc.org

Realtor/Owner Contact

Jill Spratt
SVN Core 3
(309) 590-7900 ext 302 | jill.spratt@svn.com

Property and Area Description

Excellent land on Bloomington's West Side. Developed and ready to build on. Close Proximity to Interstate74 / 55 / 39. Just minutes from the Rivian Automotive Plant. PROPERTY HIGHLIGHTS -EASY ACCESS TO INTERSTATE 74/55/39 AND IL ROUTE 9 -BLOOMINGTON/NORMAL IS CENTRALLY LOCATED BETWEEN CHICAGO,ST LOUIS AND INDIANAPOLIS -HEAVY RETAIL AND INDUSTRIAL AREA -VARIOUS LOT SIZES AVAILABLE

Population

10 Mile Radius	20 Mile Radius	30 Mile Radius
146,559	189,108	317,969

Source: ESRI®, 2024

Households

10 Mile Radius	20 Mile Radius	30 Mile Radius
60,291	77,114	130,482

Source: ESRI®, 2024

Transportation

Rail Served: Unknown
Rail Served By: Unknown
Rail Accessible: Unknown
Rail Infrastructure in Place: Unknown

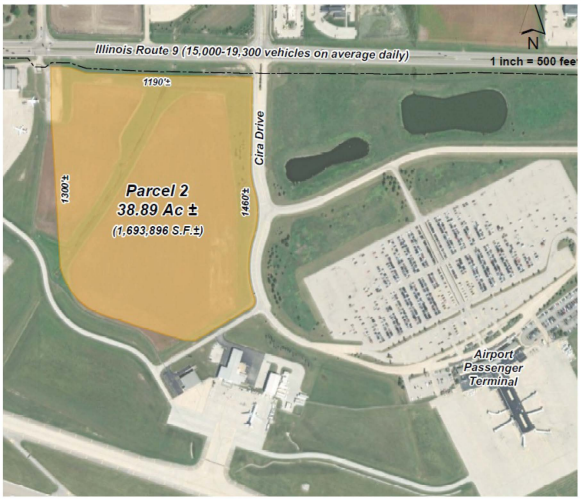
Utilities

Natural Gas: Nicor
Water: City of Bloomington
Sewer: Bloomington Normal Water Reclamation Disctrict (BNWRD)

Candidate Site 5 (Bloomington, 8.6 acres, B-1 Zoning)

CIRA 38 Acres

Bloomington | Bloomington, IL | US | McLean County
Available Acres: 38.9 |



Zoning:	Other
Topography:	Generally Flat
Setting:	Mixed-Use Business Park
Within City Limits:	Yes
Lease Rate Note:	Negotiable based on fair market rate.
Last Updated:	Sep 30, 2024

Economic Development Contact

Casey Peterson
B-N Economic Development Council
200 W. College Ave Ste. #402
Normal, IL 61761
(309) 452-8437 | casey@bnedc.org

Property and Area Description

• Approx. – 39± Acres for Development • Land Uses: Commercial, Office, Retail, Warehouse/ Distribution/Cargo • Site Zoning : S-5 Airport District • Site Access Points: CIRA Drive & Airport Road • Visibility: Illinois Route 9/East Empire Street (15,000+ Daily Vehicles) • < 5 Miles to Interstate 55 (Approx. 10 Min) • Willing to Divide •Utilities On-Site • No Heigh t Restrictions • No Noise and /or Lig h ting Restrictions • Minimize Wildlife Attractions • Dry-Bottom Stormwater Detention • Greenfield Site with Access to Utilities • State of Illinois Enterprise Zone Benefits • Environmentally Cleared • Adjacent Air Cargo Facility

Population

10 Mile Radius	20 Mile Radius	30 Mile Radius
146,103	175,018	250,997

Source: ESRI®, 2024

Households

10 Mile Radius	20 Mile Radius	30 Mile Radius
60,022	71,597	102,680

Source: ESRI®, 2024

Transportation

Nearest Highway: Illinois Route 9 (0 mi.)
Nearest Interstate: Interstate 55/74 (10.5 mi.)
Nearest Airport: Central Illinois Regional Airport (BMI) (0 mi.)
Nearest Commercial Airport: Central Illinois Regional Airport (BMI) (0 mi.)
Rail Served: No
Rail Served By: None
Rail Accessible: No
Rail Infrastructure in Place: No

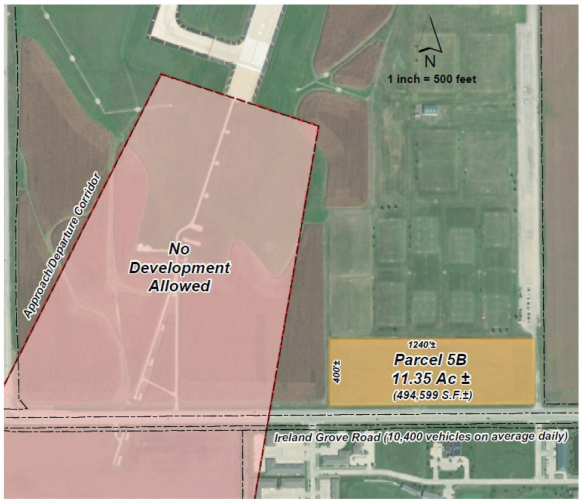
Utilities

Natural Gas: Nicor Gas
Water: Municipal
Sewer: Municipal

Candidate Site 6 (Bloomington, 38.9 acres, P-3 Zoning)

CIRA 11 Acres

Bloomington | Bloomington, IL | US | McLean County
Available Acres: 11.35 |



Zoning:	Other
Topography:	Generally Flat
Setting:	Mixed-Use Business Park
Within City Limits:	Yes
Lease Rate Note:	Negotiable based on fair market rate.
Last Updated:	Sep 30, 2024

Economic Development Contact

Casey Peterson
B-N Economic Development Council
200 W. College Ave Ste. #402
Normal, IL 61761
(309) 452-8437 | casey@bnedc.org

Property and Area Description

Approx. –113± Acres for Development • Land Uses: Commercial/Retail, Office, Industrial, Warehouse/Distribution • Site Zoning: S-5 Airport District • Adjacent Zoning: B-1 Highway Business District • Site Access Points: Ireland Grove Road • Visibility: Ireland Grove Road (10,400± Daily Vehicles) • Utilities On -Site/Immediate Proximity • Airspace Height Restrictions (Approx. 70' AGL) • Shielded Lighting Restrictions • Minimize Wildlife Attractants • Dry-Bottom Stormwater Detention

Population

10 Mile Radius	20 Mile Radius	30 Mile Radius
143,852	172,369	234,356

Source: ESRI®, 2024

Households

10 Mile Radius	20 Mile Radius	30 Mile Radius
59,211	70,625	95,858

Source: ESRI®, 2024

Transportation

Nearest Highway: Illinois Route 9 (1 mi.)
Nearest Interstate: Interstate 55/74 (11 mi.)
Nearest Airport: Central Illinois Regional Airport (BMI) (0 mi.)
Nearest Commercial Airport: Central Illinois Regional Airport (BMI) (0 mi.)
Rail Served: No
Rail Served By: None
Rail Accessible: No
Rail Infrastructure in Place: No

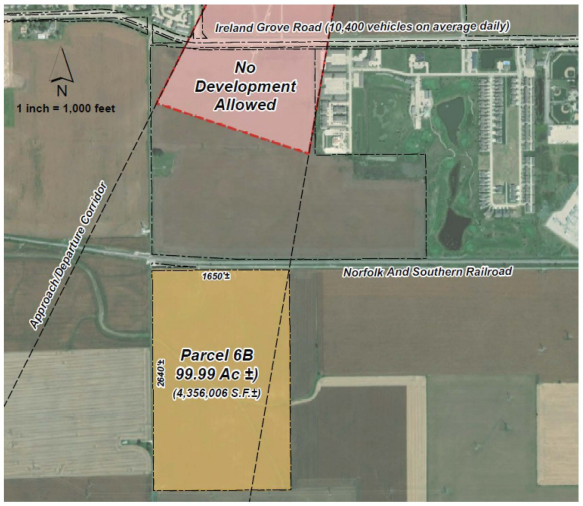
Utilities

Natural Gas: Nicor Gas
Water: Municipal
Sewer: Municipal

Candidate Site 7 (Unincorporated McLean County, 11.4 acres, A Zoning)

CIRA 110 Acres

Bloomington, IL | Bloomington, IL | US | McLean County
Available Acres: 99.9 |



Zoning:	Other
Topography:	Generally Flat
Adjacent Available Acres:	111
Setting:	Agricultural Land
Within City Limits:	Yes
Lease Rate Note:	Negotiable based on fair market rate.
Last Updated:	Sep 30, 2024

Economic Development Contact

Casey Peterson
B-N Economic Development Council
200 W. College Ave Ste. #402
Normal, IL 61761
(309) 452-8437 | casey@bnedc.org

Property and Area Description

Approx. – 100± Acres for Development • Land Uses: Industrial/Manufacturing, Warehouse/Distribution, Commercial • Site Zoning: S-3 Airport Noise Impact District • Adjacent Zoning: Agricultural • Site Access Points: Abraham Road • Direct Access to Norfolk & Southern Railroad (Active Line-Portion Dual Track) • Proximity to Large Power Distribution Substation

Population

10 Mile Radius	20 Mile Radius	30 Mile Radius
146,551	171,358	236,823

Source: ESRI®, 2024

Households

10 Mile Radius	20 Mile Radius	30 Mile Radius
60,230	70,242	96,781

Source: ESRI®, 2024

Transportation

Nearest Highway: US Route 150 (1 mi.)
Nearest Interstate: Interstate 55/74 (10 mi.)
Nearest Airport: Central Illinois Regional Airport (BMI) (0 mi.)
Nearest Commercial Airport: Central Illinois Regional Airport (BMI) (0 mi.)
Rail Served: Yes
Rail Served By: Norfolk Southern Railway
Rail Type: Greenfield
Rail Accessible: Yes
Rail Infrastructure in Place: No

Utilities

Natural Gas: Municipal
Water: Municipal
Sewer: Municipal

Candidate Site 8 (Unincorporated McLean County, 99.9 acres, A Zoning)